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ICT Usage and Business Performance of SMEs in Sri Lanka: The Mediation Effect of Bounded Rationality

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Abstract

The study examined empirically how Information & Communication Technology (ICT) usage affects the bounded rationality and business performance of Small & Medium Enterprises (SMEs) in Sri Lankan. Data were collected from 400 of SMEs employing structural questionnaire having the face to face interviews. The Partial Least Squares-Structural Equation Modelling (PLS-SEM) was utilized to analyze the data. The results discovered that ICT usage in the organization perfectly makes a significant positive impact on business performance as well as negatively influenced the bounded rationality. Simultaneously, the study uniquely found that bounded rationality makes a negative impact on business performance. Meanwhile, bounded rationality plays a dominant role in the relationship between ICT usage and business performance. The study strongly recommends SMEs to strengthen the usage of ICT especially, mobile technology with applications that play a leading role to develop the SMEs by enhancing the decision-making power.

Keywords:- Bounded Rationality, Business Performance, ICT Usage, SMEs

1. INTRODUCTION

SMEs are the most important economic entity of any country in either develop or developing. Reasons have been discussed by Prasad, Tata & Guo (2012), and Priyanath & Premarathne (2014), said SMEs provide employment opportunities, reducing the poverty, income inequality, and inflation, as well as introducing innovative products, services, and business types for the economy. Nevertheless, some scholars explored that the contribution of SMEs to the GDP has remained below as expected and the failure rate is high (Agwu & Emeti, 2014; Fatoki, 2011). Less

performance of these businesses is the significant problem of survival in the market depend on various constraints and challenges (Abor & Quartey, 2010; Yoshino & Taghizadeh-Hesary, 2016). One of the major constraints is mostly reflected by the Transaction Cost (TC) (Carmel & Nicholson, 2005; Priyanath, 2017).

SMEs suffer hazards from opportunism deployed by the exchange partners (Carmel & Nicholson, 2005; Priyanath, 2017, Priyanath & Premarathne, 2017c). According to Priyanath (2017), reasons depend on the information asymmetry and further he mentioned the poor capability of access, assess, and handle the information for proper decision making are the issues. In the Transaction Cost Economics (TCE) perspective this incapability of access, assess, and make decisions on the information introduced as the bounded rationality (Williamson, 1981). Therefore, due to the bounded rationality, SMEs have additional costs as search information, negotiation, monitoring transaction activities, and make enforcement to correct the transactions which should additionally pay on avoiding the opportunism and survive in the market (Priyanath, 2017; Priyanath & Buthsala, 2017; Zhang, 2009).

At present usage of ICT directly associate with using applications that tend to use comprehensive decision-making capabilities to SMEs and it increases the business performance (Pham, Le, & Nguyen, 2013). Organizations can switch their organizational structure from an old

more hierarchical inefficient structure to a more flattened efficient structure and it also increases the business performance (Indris, & Primiana, 2015). Furthermore, ICT infrastructure, especially telecommunication directly creates a path to attend the dynamic marketplace and helps to preserve the competitiveness, improve profitability and success because it disseminates the knowledge among the business partners (Arutė & Gatautis, 2014; Shamsuzzoha, Helo, & Sandhu, 2017). Therefore, presently, SMEs can adopt such ICT to minimize the bounded rationality and thereby the opportunism and increase their business performance. Although it has been applied to some extent still they incapable to reach the expected level of contribution to the economy (Abor & Quartey, 2010; Fatoki & Asah, 2011). Therefore, it is important to examine the impact of bounded rationality on the effect of ICT usage of SMEs for their business performance particularly in Sri Lanka. Thus, the research attempts empirically explore the effect of ICT usage on bounded rationality and business performance particularly SMEs in Sri Lanka and evaluate the mediating effect of bounded rationality on ICT usage and business performance.

The research has developed a distinctive combined model using theoretical bases of ICT usage, bounded rationality, and business performance to understand how ICT usage affects the bounded rationality and business performance in the SME environment which is a unique contribution and has not been

empirically studied by previous researchers. Consequently, evaluating the mediating effect of bounded rationality in the relationship between ICT usage and business performance also distinctive contribution

THEORETICAL BACKGROUND

ICT Usage: The world has identified a valuable aspect such as information is the most important aspect which should be considered in all the business functions at the beginning of the information era (James, 2007). Therefore, it has been understood that all the things depend on the information and the literacy of handling such information was very essential for using such information. Thus, the American Library Association (ALA) has defined it as ICT literacy and mentioned four aspects that should be obtained to have such literacy including 1. The ability to recognize when information is needed; 2. The ability to locate the needed information; 3. The ability to evaluate the suitability of retrieved information, and 4. The ability to use effectively and appropriately the needed information (American Library Association (ALA) 1989). While the technology was progressively improving in the world the scope of the operationalization of ICT literacy also changed. Glister (1997: P. 01) provided a general explanation of ICT literacy as "Digital Literacy" and which explained it as "an ability to understand and to use information from a variety of digital sources" as well as he mentioned that "mastering ideas, not keystrokes". Therefore, it is

not only the familiarity but also practical use.

Digitally literate people are fast-moving entities from one kind of medium to another kind and find out best fit knowledge through the information to become skilled people and represent knowledge to the audience in the easiest way to understand (Lankshear & Knobel, 2003). Simultaneously, Lennon, et al. (2003: P. 08) mentioned "the interest, attitude, and ability of individuals to appropriately use digital technology and communication tools to access, manage, integrate, and evaluate information; construct new knowledge, and communicate with others to participate effectively in society". According to the above definitions, ICT usage may in beyond ICT literacy or digital literacy. It can be extricated that the ICT implementation and the practical use of its various dimensions should be considered while experimenting with the ICT usage of an organization. Most of the researchers who are concerned about ICT literacy or digital literacy have studied the ICT usage of the organization (Esselaar, et al., 2007).

Bounded Rationality: The logic of price mechanism and the perfectly competitive market emphasized by the classical economists had been criticized by the Coase (1937) and explained it does not exist in the real world and exchange partners pay costs to eliminate the imperfection because of imperfection due to the information asymmetry. Humans are bounded rational due to the incapability of handling information

(Simon, 1990). According to his generalization, this limitation is two folds. The former is cognitive attributes and the latter is language processing limitations. Therefore, due to information asymmetry or the incapability of processing information always makes benefit to one party than the other party, and hence, opportunism is elevated in the market (Williamson, 1981). Therefore, the barriers in collecting, processing, and assessing information for making the proper decision affecting the business introduced as the bounded rationality (Priyanath & Buthsala, 2017; Zhang, 2009).

These constraints of access, assess, and decision-making on the information makes the opportunity for one transaction partner to hide the actual situation and generate fear in the opposite partner (Gigerenzer & Goldstein, 1996; Nguyen & Crase, 2011). Economizing this gap called bounded rationality takes two forms: Former concerns decision processes, and the latter involves governance structures, and thus it increases the cost for the one partner. TCE is principally concerned with the economizing consequences of assigning transactions as opposed to the realities of bounded rationality, the costs of planning, adapting, and monitoring transactions need to be considered (Williamson, 1985).

Business Performance: According to Bourne et al. 2003, and Khare, Saxsena, & Teewari, 2012, the performance is a value of the outcome which is evaluated on a particular type of standard or benchmark. In the SME context, the performance was defined by Nieman, Hough & Nieuwenhuizen (2003) said if the business survives more than two years having a staff of more than five and less than thirty by earning profit as well as expand the business in terms of infrastructure and growth can be the success. The success of the SME frequently depends on growth or profitability. Growth could be measured in terms of turnover, employment levels, or as the percentage change in sales over a year, investment plans, and expected achievements, all of which can be calculated quantitatively (Simpson, Taylor & Barker, 2004; Yazdanfar & Öhman, 2014).

However, the selection of the evaluation measurements is a more difficult task and hence, a heavy foundation of the best measurements cannot be found (Richard, Devinney, Yip, & Johnson, 2009). Frequently, most researchers used only the financial measures for estimating the performance. Nevertheless, some recent studies mostly rely on the relevance of non-financial perspectives such as stakeholder satisfaction, employee growth, skill improvement, flexible lifestyle, business survival, customer satisfaction, customer retention, and career progress (O'Regan & Ghobadian, 2004; Walker & Brown, 2016).

Some researchers argued that concentrating in the narrow range of measures obtain inappropriate result about the success of an organization and therefore, it should be used multiple types of measures which provide significant explanatory power

to predict the business achievements (Haber & Reichel, 2005; Simpson et al., 2004). Garengo, Biazzo, & Bititci (2005) has also mentioned performance measurement systems play an important role in SME's development. A researcher who conducted researches on measuring the performance of SMEs particularly made more attention to overall performance rather than the traditional measures of only using financial performance (Saunila, 2016; Waśniewski, 2017). Two types of performance were identified by Santos & Brito, (2012) such as financial performance and strategic performance instead of standard operational performance. Waśniewski (2017) proposed another system for measuring the performance of SMEs which depended on the key success factors of the organization. Thereby, including all the consideration this research uses not only the strategic factors but also the operational factors to evaluate SME business performance (Santos & Brito, 2012; Tarutė & Gatautis, 2014).

RESEARCH MODEL AND HYPOTHESES

Although the major objective is to achieve the expected higher performance level SMEs fail to reach it due to the situation of imperfect behavior of the market (Carmel & Nicholson, 2005; Dyer & Chu, 2003; Nooteboom 1993; Priyanath, 2017). Priyanath (2017), Priyanath & Premaratne (2017a, 2017b) stated that opportunism is the issue that incurred the TC and thereby low performance. Opportunism arose due to the bounded rationality (Zhang, 2009). Bounded rationality of the decision-makers identified as the incapability of access, assess, evaluating, and make decisions on the business functions. Therefore, providing such adequate, reliable, and timely information to the SMEs reduces the bounded rationality and thereby increase the performance because it minimizes the opportunism as well as the TC. The major responsibility of ICT is to provide the above-mentioned adequate, reliable, and timely information for facilitating access, assess, and decision making (James, 2007; Kenneth & Jane, 2013). Therefore, certainly, ICT reduces the bounded rationality and increase the business performance of SMEs. Thus, how the mediating effect of bounded rationality. Figure 01 conceptually established this rationale.
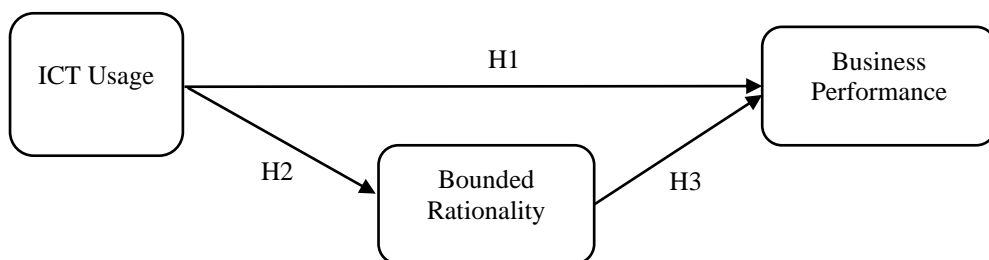

Figure 1: Relationships among ICT, bounded rationality and business performance of SME

ICT usage and business performance: ICT usage is been applied to minimize market imperfection by providing proper information flows among the business partners and can eliminate the interdependencies among the related factors which are contributing to the growth of the business (Cordella, 2006). ICT usage, such as telephones, mobile devices, communication networks, and electronic data transferring facilities enhance the access, assess including management of information as a valuable resource and produce required appropriate knowledge and enhance the rationality of the people to make the proper decision in the collaborative environment which directly cause to minimize the market barriers by reducing the TC as well as increase the business performance (Karim et al., 2018; Kenneth & Jane, 2013; Wambaria, Kibas, & Asienga, 2016). Besides, these infrastructure capabilities improve the quality of services which mainly focused on external communication with other organizations and customers easily. Therefore, according to Nooteboom (1993), organizations attempt on more

outsourcing and mitigate the transaction cost since the use of ICT. ICT is the way of assembling the requirements of corporate

entrepreneurship which is needed by firms to accomplish higher productivity, efficiency, and performance in the rapidly changing knowledge economy (Kuratko & Audretsch, 2013). The ICT reduces the time gap between product idea

and manufacturing as well as product manufacturing to customer delivery while employing fewer employees and hence, the business can attain good performance (Kathleen & Wilburn, 2018). Conversely, according to Consoli (2012), he mentioned that the ICT infrastructure directly affects the economic growth of an organization. Therefore, the study predicts the following hypothesis;

H1: ICT usage positively relates to the business performance of SMEs

ICT usage and bounded rationality: ICT engage all stakeholders who involve from the supply of raw materials for manufacturing to delivery of the finished product to the customer together by applying various infrastructure and applications and therefore, a communication gap between these parties does not exists (Kathleen & Wilburn, 2018). These adequate, reliable, and timely information increase the rationality by providing easy access to the information, methods for assessing information easily by the applications and finally make proper decisions on that information which leads to reduce the bounded rationality (Cordella, 2006; Zhang, 2009) Furthermore, Markus & Thamos (2002) stressed that the digital networks mitigate the bounded rationality. Thus, the ICT usage facilitates access and assess information which directly affects to minimize the bounded rationality of the decision-makers. Therefore, the following hypotheses are developed:

H2: ICT usage negatively relates to the bounded rationality of SMEs

Bounded Rationality and business performance: Opportunistic behavior of the business partners generated by several factors and bounded rationality is one leading factor (Williamson, 1985). Therefore, a less rational person makes fear for transactions and use extra methods to minimize it and these safeguarding attempts generate more cost on searching information, negotiation, monitoring, and enforcement on the transactions (Dyre & Chu, 2003; Hobbs, 1996; Priyanath & Premarathne, 2017; Priyanath & Buthsala, 2017). Finally, this extra cost reduces business performance (Priyanath & Premarathne 2017). Therefore, the following proposition is been made by the study:

H3: Bounded rationality negatively relates to the business performance of SMEs.

ICT usage bounded rationality and business performance: the consistency on methods of the transaction between both suppliers to business and business to customer in the newest technologies has been increased and therefore it improves the performance of the business organizations (Mingle & Dzandu, 2013). Consoli (2012) conducted a literature analysis of ICT impact on companies and identified significant positive effects into 4 groups such as performance, growth, expansion, and new products and some other studies found ICT investment as the policy may affect considerably on both productivity and the economic growth of an organization (Sabbagh et al., 2012). According to the establishment of hypothesis H2, ICT usage reduces the bounded rationality, and consequently, bounded rationality reduces the business performance as mentioned in hypothesis H3. Therefore, the study predicts that:

H15: Bounded rationality has a mediating role in the relationship between ICT usage and business performance of SMEs

2. METHODS

As mentioned in the theoretical framework three pieces of theories combined for addressing the research problem and therefore, use the deductive approach, and the method is quantitative. The study selected only the manufacturing SMEs and the survey method is used for the data collection on a unit of analysis as the SME owners. Department of Census and Statistics (DCS) has defined for SMEs as 5 – 24 persons engaged for small industries and 25 – 199 persons engaged for medium enterprises. It is used as the study population and the quantity is value is 81,531 SMEs. 400 of SMEs are selected employing the 'Inverse Square Root Method' of minimum sample size determination formula for the Partial Least Square - Structural Equation Modelling (PLS-SEM) after conducting the pilot survey and analysis of 110 SMEs (Kock & Hadaya, 2018; Ranatunga, Priyanath & Meegama, 2020). The sample populated according to the percentage share of the SMEs distribution in each district and determine the number of SMEs to

represent all the districts in Sri Lanka. A stratified sampling method was utilized to select items representing all the manufacturing industrial divisions categorized in the ISIC category.

The 7-point Likert scale questionnaire is prepared on a two-step procedure including identifying the pool of items for each variable by reviewing the past literature and select items carefully according to the environment of Sri Lanka. Therefore, the items of the questionnaire were systematically designed according to the literature published in cited journals. In order to protect the validity and reliability of the study, the questionnaire has been pre-tested by using a pilot survey before the main survey and it is verified whether the questions are understood; whether the instructions are cleared; whether the order of the questions is appropriate and the questions are useful, etc. Face-to-face interviews were conducted with owners/managers of SMEs to collect data. PLS-SEM is identified as the most useful analysis technique for multiple independent and dependent variables. The study used this technique and the reliability and validity tests and the efficiency of the model have been examined by multi-collinearity issues, R2, effect size (f2), and predictive relevance (Q2). The SmartPLS (version 2) software is used to analyze data.

Measures: ICT usage considered as a wide range of attributes such as implemented ICT infrastructure, used ICT applications, established organization's ICT policy, available

ICT skilled human resources, and used mobile technology (Giotopoulos, et al., 2017; Mithas, Tafti, Bardhan, & Goh, 2012; Pham, 2010; Pham et al., 2013). According to Pham (2010) and Pham et al. (2013) 10 items were used to measure the infrastructure and another 10 items used to measure applications while 06 items are being used for measuring the policy and 04 items to measure skilled human resources. Another 10 items have been utilized to operationalize the used mobile technology. According to Priyanath (2017), three major attributes of bounded rationality have been identified. Measure the limitation of access to the information, identify the limitations of assessing information, and evaluate the difficulty of making good decisions on the obtained information.

Because bounded rationality mainly focused on the information asymmetry as well as the incapability of processing information, the level of access, and assessing information of the SMEs give a good evaluation of their bounded rationality. Therefore, the study employed 1) Explore the ability to find information on the market, suppliers, and buyers on the accessing information by using 08 items, 2) information evaluating capability on each of market, supplier, and the buyer under the assessing information by using another 04 items and finally, 3) consider the capability of handling consequences which come from the market, suppliers, and buyers under the capability of making good decisions on such information by using another 04 items in order to

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operationalize the bounded rationality. Two variations of performance measures are been practically identified as appropriate to this study such as financial and operational performance (Liang, Huang, Yeh, & Lin, 2010; Santos & Brito, 2012; Tarutė, & Gatautis, 2014). The financial performance measured as profitability, growth, market value, and conversely, strategic or operational performance indicated by customer satisfaction, employee satisfaction, environmental performance, and social performance. Cover the financial performance, profitability operationalizes by 05 items and the growth operationalizes by using another 05 items. Consequently, within the strategic or operational performance, customer satisfaction operationalizes by 07 items, employee satisfaction operationalizes by 05 items, environmental performance operationalizes by 04 items and social performance operationalize by another 02 items.

3. RESULTS

The measurement model was first analyzed by examining the reliability and validity of the seven first-order constructs as shown in table 1 (Hair, Sarstedt, Ringle, & Mena, 2012; Robson, 2002; Thatcher, 2010). According to table 1 the indicator reliability examined by the factor lodgings and all factor loading are above the threshold value 0.7 in the statistical significance at 0.05 level. The measures of Cronbach's α and composite reliability of seven constructs also shown in table 1 are above the threshold value 0.7 and hence the first-order constructs well above indication high reliability. Consequently, two validity tests such as convergent validity and the discriminant validity have been evaluated on the seven first-order constructs. All average variance extracted (AVE) values exceeded the required 0.5 thresholds and reached to the convergent validity and indicators reflect their latent constructs. Finally, discriminant validity (see table 2) is supported as the average shared variance of a construct and its indicators (diagonal values that are indicated by bold letters of the square root of AVE values) exceed the shared variance with other constructs (Fornell & Larcker, 1981).

Table 1: Analysis of First-Order Constructs

	Construct	Loading	t-Statistics	CR	AVE	α[*]
1	**Business Performance Customer Satisfaction**			**0.971**	**0.828**	**0.965**
	Customer feedback on our production	0.937	57.091			
	Changes of production according to the customer feedback	0.920	41.554			
	Introduce new production according to the customer requests	0.905	34.066			
	Growth of Number of customers in each	0.888	41.952			

	marketing area					
	Complaints on the production(s) receive from customers	0.894	26.929			
	The frequency of returning items	0.886	30.479			
	Growth of popularity of the tradename	0.939	49.029			
2	**Business Performance Employee Satisfaction**			**0.864**	**0.560**	**0.808**
	Growth of expenditure for training programs	0.759	26.589			
	Growth of providing gift and bonus for the employee	0.775	18.233			
	Decrement of resignation	0.700	9.635			
	Increment of employee salary	0.755	10.859			
	Increment of employee welfare	0.750	10.559			
3	**Business Performance Growth**			**0.915**	**0.682**	**0.884**
	Opening of new factory	0.825	21.153			
	Increment of number of employees	0.828	25.212			
	Establishing new buildings	0.795	16.089			
	Establishing new Machines	0.858	32.647			
	Growth of investments	0.823	24.089			
4	**Business Performance Profit**			**0.970**	**0.869**	**0.962**
	Growth of monthly sales volume	0.968	126.045			
	Growth of monthly income	0.926	59.015			
	Growth of profit	0.946	73.546			
	Decrement of sold product returning volume	0.909	40.559			
	Increment of stock movement	0.910	66.941			
5	**Bounded Rationality Access Information**			**0.986**	**0.681**	**0.984**
	Able to find an accurate price for the product in the market.	0.931	43.897			
	Able to find the new market and buyers for the product.	0.964	109.346			
	Able to find the information about reliable buyers for the product.	0.963	120.692			
	Able to easily identify the activities of the competitors.	0.954	117.510			
	Able to easily find accurate information about raw materials.	0.984	308.889			
	Able to easily find accurate information about new suppliers for raw materials.	0.982	226.195			
	Able to easily find information about reliable suppliers for raw materials.	0.975	183.429			
	Able to easily find the required technology about my production process.	0.831	28.423			
6	**Bounded Rationality Assess Information**			**0.991**	**0.967**	**0.989**
	Capability to evaluate the needed information about the behaviour of the	0.985	206.793			

	market price on production					
	capability to evaluate the needed information about the behaviour of the market price on raw materials	0.990	297.456			
	Capability to evaluate the needed information about the threats from the competitors	0.989	299.416			
	Capability to evaluate the needed information about the change of business environment, political situations and external pressures	0.971	103.949			
7	**Bounded Rationality Decision on Information**			**0.981**	**0.927**	**0.974**
	Capability to make proper sales decisions	0.926	48.506			
	Capability to identify the market behaviour of the raw materials and make proper decision on purchasing them	0.972	164.011			
	Capability to make decision to avoid the threats from competitors.	0.984	276.133			
	Capability to make decisions to face the changes in business environment, political situation, and the external pressures.	0.969	78.762			

(n=400),
Source: Survey data, 2020

Table 2: Discriminant Validity of First-Order Constructs

		1	*2*	*3*	*4*	*5*	*6*	*7*
1	**BPF Growth**	**0.826**						
2	**BPF Profit**	0.813	**0.932**					
3	**BPO Cus**	0.810	0.904	**0.910**				
4	**BPO_EMP**	0.641	0.615	0.621	**0.748**			
5	**Access**	-0.533	-0.652	-0.648	-0.360	**0.825**		
6	**Assess**	-0.557	-0.667	-0.643	-0.348	0.802	**0.983**	
7	**Decision**	-0.510	-0.625	-0.603	-0.329	0.852	0.960	**0.963**

(n=400),
Source: Survey data, 2020

The second-order constructs are been established by using the latent variable scores of the first-order constructs. The table 3 indicated that the seven endogenous latent variables such as business performance (BP), Bounded Rationality (BR), ICT Applications (ICT APP), ICT Human Resources (ICT HR), ICT Mobile technology (ICT MT), ICT Policy

(ICT Policy), and ICT Infrastructure (ICT INF) established under the second-order level in order to evaluate the hierarchical model. As discussed in the first-order model evaluation the second-order model also has been tested for reliability and validity. All the factor loadings, Cronbach's α, and composite reliability exceed the threshold value of 0.7 at the significance level 0.05, and hence, the constructs obtain the reliability. The AVE values of the constructs are above 0.5 and according to table 4 the square root of AVE values in the diagonal exceed the shared variance and both of the convergent and the discriminant validity of the constructs received and satisfied.

Table 3: Analysis of Second-Order Constructs

	Construct	Loading	t-Statistics	CR	AVE	α*
1	**Business Performance**					
	Profit	0.805	17.389			
	Growth	0.880	31.392			
	Employee satisfaction	0.920	76.508			
	Customer satisfaction	0.921	76.113	0.942	0.700	0.928
	Policy on environmental protection	0.757	16.503			
	Allocation of job opportunities for employees who represent less income group	0.757	14.994			
	Conducting social activities such as help to disabilities, cultural events etc.	0.796	20.453			
2	**Bounded Rationality**					
	Access to the information	0.931	392.167			
	Assess the information	0.964	541.726	0.994	0.981	0.990
	Make decisions on information	0.963	421.832			
3	**ICT Usage Infrastructure**					
	Use fixed line telephone for business purposes.	0.749	13.504			
	Use computers for business purposes.	0.912	51.118			
	Use local area network	0.915	54.381	0.905	0.659	0.869
	Has Broadband internet access and Wifi	0.756	14.478			
	Use other peripherals like POS, barcode readers, fax machines, photocopy/scanner machines etc.	0.704	11.733			
4	**ICT Usage Applications**					
	Handle business activities using standard applications such as MS office with the computers	0.743	17.700	0.919	0.620	0.898

	Use customized software for handling business functions	0.798	24.848			
	Use Management Information Systems	0.806	19.903			
	Use Databases and knowledge bases	0.862	32.195			
	Organization has e-Mail address	0.752	12.706			
	Use social media like Facebook for business purposes	0.778	13.691			
	Use e-Banking/e-money applications for business purposes	0.766	14.988			
5	**ICT Usage Policy**					
	Investment for ICT development	0.966	107.031			
	Assess the ICT infrastructure on regular time	0.956	52.864			
	Security policy	0.943	62.290	**0.983**	**0.908**	**0.980**
	Followed rules and regulations	0.950	61.396			
	Employee training as a policy	0.941	48.144			
	Updating software and hardware as a policy	0.961	89.371			
6	**ICT Usage Human Resources**					
	Employees have IT knowledge	0.731	13.045			
	Recruiting specialized IT persons	0.802	19.190			
	Employees can use computers and related equipment's	0.814	17.127	**0.872**	**0.578**	**0.822**
	Employees use Internet Messaging or e-mails	0.717	12.293			
	Decision making using MIS	0.734	12.832			
7	**ICT Usage Mobile Technology**					
	Use of mobile phones	0.852	25.683			
	Use of mobile equipment with internet connection for business purposes	0.867	28.411			
	Use of mobile applications for communications (Viber, WhatsApp, Imo)	0.867	27.954			
	Use of social media through mobile connection(Facebook, LinkedIn)	0.883	34.441	**0.958**	**0.718**	**0.950**
	Employees use internet massaging or email through mobile phones for business purposes	0.736	17.133			
	Generally, employees use internet and its services through mobile phones for business purposes	0.850	27.536			
	Generally, employees do video conferencing through mobile	0.848	29.956			

	Loading	t-Statistics			
phones on their activities					
Use knowledge bases through mobile phone for solving business issues	0.804	19.417			
Do innovation for business using internet through mobile phones	0.909	53.945			

(n=400),
Source: Survey data, 2020

Table 4: Discriminant Validity of Second-Order Constructs

		1	2	3	4	5	6	7
1	BP	**0.837**						
2	BR	-0.624	**0.990**					
3	ICT App	0.711	-0.501	**0.787**				
4	ICT HR	0.770	-0.523	0.735	**0.760**			
5	ICT MT	0.750	-0.594	0.584	0.757	**0.848**		
6	ICT Pol	0.706	-0.476	0.721	0.725	0.558	**0.953**	
7	ICT Inf	0.721	-0.584	0.761	0.692	0.660	0.665	**0.812**

(n=400),
Source: Survey data, 2020

The latent variable scores of second-order constructs are used to establish the third-order constructs. Table 5 indicated that the three endogenous latent variables such as business performance (BP), Bounded Rationality (BR), and ICT usage established under the third-order level in order to evaluate the hierarchical model. As discussed above the third-order model also has been tested for reliability and validity. All the factor loadings, Cronbach's α, and composite reliability exceed the threshold value of 0.7 at the significance level 0.05, and hence, the constructs obtain the reliability. The AVE values of the constructs are above 0.5 and according to table 6 the square root of AVE values in the diagonal exceed the shared variance and these measures give the convergent and discriminant validity to the constructs.

Table 5: Analysis of Third-Order Constructs

	Construct	Loading	t-Statistics	CR	AVE	α[*]
1	**Business Performance**					
	Growth	0.894	20.321			
	Profit	0.921	20.433	0.938	0.716	0.920
	Customer satisfaction	0.914	21.256			

	Employee satisfaction	0.780	14.989			
	Allocation of job opportunities for employees who represent less income group	0.762	13.012			
	Conducting social activities such as help to disabilities, cultural events etc.	0.792	14.253			
2	**Bounded Rationality**					
	Access to the information	0.989	55.554	**0.994**	**0.980**	**0.990**
	Assess the information	0.993	71.324			
	Make decisions on information	0.989	58.247			
3	**ICT Usage**					
	ICT App	0.891	19.414			
	ICT HR	0.910	22.595			
	ICT MT	0.833	17.822	**0.941**	**0.761**	**0.921**
	ICT Pol	0.859	17.268			
	ICT_Inf	0.868	19.976			

(n=400),
Source: Survey data, 2020

Table 6: Discriminant Validity of Third-Order Constructs

		1	2	2
1	**BP**	**0.846**		
2	**BR**	-0.610	**0.990**	
3	**ICT Usage**	0.746	-0.613	**0.872**

(n=400),
Source: Survey data, 2020

Finally, the inner model has been assessed according to the given guidance by Hair, Hult, Ringle, & Sarstedt (2014). Initially, collinearity issues have been examined. According to both VIF values obtained 1.525, and hence the analysis does not depict any collinearity issues since VIF values are lower than the threshold 5. As well as the tolerance levels are in 6.56 which exceeded the threshold value of 0.2. Therefore, the structural model does not contain any multicollinearity issues between the independent constructs and the dependent constructs.

The next step assessed the significance of the path coefficients using β value and t-statistics to identify the effect of ICT usage on the bounded rationality and the business performance of the SMEs by using the PLS bootstrap process. The path coefficients as depicted in table 01 ICT usage has a significant positive effect on business performance including β = 0.760 and t-statistics 11.821. As well as ICT

usage has a significant negative relationship on the bounded rationality as β = -0.616 and t-statistics 10.326. Finally, table 7 shows that the bounded rationality

has a negative relationship on the business performance with β = -0.147 and t-statistics .801. Therefore, H1, H2, and H3 hypotheses have been accepted.

Table 7: Path Coefficient and Significance

Hypotheses	Relationship	Beta (Path)	T Statistics	Decision
H1	ICT Usage -> BP	0.760***	11.821	Accept
H2	ICT Usage -> BR	-0.616***	10.326	Accept
H3	BR -> BP	-0.147*	1.801	Accept

*P>0.1, **P>0.05, ***P>0.01, (n=400),
R^2 = 0.736 (BP), 0.380 (BR)
Q^2 = 0.763 (BP), 0.891 (BR)
Source: Survey data, 2020

This study concerned the mediate effect of bounded rationality on the relationship between ICT usage and the SME business performance under the H4 and this kind of relationship have not been empirically studied in the literature. According to instructions given by Zhao, Lynch &

Chen (2010) and Carrión, Nitzl, & Roldán, (2017), Table 08 shows the analysis of the mediate effect of BR and it depicts complementary mediate effect (VAE value is 0.106) between ICT usage and business performance of SMEs in Sri Lanka and the H4 is been accepted.

Table 8: Analysis of the mediate effect of bounded rationality on ICT usage and business performance of SMEs

Path	Direct effect model		Indirect effect[c]	S_e[d]	t-stat[e]	Total effect[f]	VAF axb/ (axb)+c	Type of the mediation
	β[a]	t-stat	*axb*	(SD)	*(axb)/ S_e*	*(axb) + c*		
ICT Usage → BP (c)	0.760	11.82	0.091	0.023	3.92	0.851	**0.106**	**Complementary**
ICT Usage → BR (a)	-0.616	10.32						
BR → BP (b)	-0.147	1.801						

Source: Survey Data, 2020

According to Hair et al. (2014), the next step is to study the correlation between independent and dependent variables. According to the given criteria, the model having R2 as 0.736, 0.380, which are considered as substantial. The last two steps are to examine the effect size and the predictive relevance of the bounded rationality as well as ICT usage on all dimensions according to Cohen (1988) and Chin (1998).

4. DISCUSSION

Many researchers have identified the ICT usage creates an avenue for proper information flow between the business parties and eliminate the market barriers which lead to the business performance (Kenneth & Jane, 2013; Wambaria, et al., 2016). Although it is been in reality researchers do not examine its effect on bounded rationality and conversely, it increases the business performance by reducing bounded rationality. Thus, this study is unique to the literature. First, this study predicts ICT usage positively affects the business performance of SMEs and according to the result ICT usage makes a 76% contribution to increasing the business performance. These results proved the findings of recently published other researches in the literature. Scholars like Bayo-Moriones, Billon & Lera-Lopez (2013 p. 127) said "the number of ICTs has a significant impact on communication improvement. This effect is also found about ICT intensity". The expected performance effects generated on ICT usage in manufacturing SMEs found out that communication development

encouraged by ICT adoption leads to better operational performance (positive impact of ICT) and hence, proper communication and operational performance are associated with the better final performance. What is the major effect of enhancing such communication? It reduces the bounded rationality on one hand and reduces the extra cost on other hand. This study found it and according to the result, ICT usage makes a 61.6% negative impact on bounded rationality. Similarly, Priyanath & Buthsala (2017) conducted a study on the ability to access information and bounded rationality and found a similar situation and revealed the ability to access information affects 41.4% (β=0.414 and t-value= 2.5805) to enhance the business performance of small businesses of Sri Lanka. Conversely, ICT also totally facilitates the access information and this finding proved it. Bounded rationality is measured by using incapability of access, assess the required business information, and make proper decisions on such information. The findings exhibit that these attributes of bounded rationality make a low negative impact on the business performance including a 14.7% negative effect on the business performance of SMEs. It is reasonable to understand that the high influence of ICT usage has affected to make a lower effect of bounded rationality. One of the research objectives is been exhibit in this point of view. What is the mediate effect of bounded rationality on the relationship between ICT usage and SME business performance? The above result analysis provides the

answer and bounded rationality contains a complementary mediate effect on the mentioned relationship.

5. CONCLUSION

The study mainly argued that ICT usage boosts business performance because it increases the capability of access, assess, and decision-making on the information as well as reduces the bounded rationality which directly reduces the transaction cost of SMEs and thereby increases the business performance. The study has conceptually buildup a model based on the above relationship and working hypotheses have been established to test it empirically in SMEs in Sri Lanka. The results discovered that ICT usage in the organization makes a significant positive impact on business performance as well as negatively influenced the bounded rationality. Simultaneously, the study uniquely found that bounded rationality makes a negative impact on the business performance of SMEs in Sri Lanka. Meanwhile, the study revealed that bounded rationality plays a dominant role in the relationship between ICT usage and the business performance of SMEs. It means that while the ICT usage is making the 76.0% positive effect the bounded rationality impels it by 14.7%. According to the research findings, it is reasonable to identify that the Sri Lankan government has implemented more facilities as well as education to enhance the knowledge distribution on ICT, and hence the citizen generally rich in handling digital technology especially mobile

equipment as well as internet-based applications.

This research has made several contributions. First, it has developed a distinctive combined model using theoretical bases of ICT usage, bounded rationality, and business performance to understand how ICT usage affects the bounded rationality and business performance in the SME environment. It is a unique contribution and has not been empirically studied by previous researchers. Therefore, this kind of technology and cost-based approach to measuring business performance especially, the SME sector makes valuable insight to understand the practical efficacy of theories. Second, ICT usage has been quantified by this study covering all the available attributes that have not been considered extensively in the past researchers and also the business performance especially, in the context of SME. Thus, it is a vigorous exercise for future researchers on operationalizing this kind of theoretical combination especially, in the SME context. Third, the mediate effect of bounded rationality between the relationship of ICT usage and business performance has not been studied in the past literature and thus this research obtained an opportunity to present it to the research world.

The study recommends policymakers to enhance the existing technologies especially on mobile technologies other than the sophisticated computer-related applications to cater to the access, assess, and evaluation information of SMEs in Sri Lanka. Because receiving such information

processing facilities through the mobile devices cheaper and hence, the SMEs able to bear the cost other than introducing the computer-related technologies and even all the low literacy people also can effectively utilize the technology. Government and private sector organizations that provide telecommunication facilities can maintain services like mobile applications, mobile data services to enhance the connections between SMEs and the market to avoid the information asymmetry and it will help to make information-rich SMEs network.

This research uses several dimensions of ICT usage as the second-order constructs. The empirical evidence of such dimensions with bounded rationality has not been in the past literature especially, regarding SMEs and it is a prominent starting point. Nevertheless, the technological face of a country can be changed and future researchers should fine-tune and enhance these dimensions as suitable. This research used a relatively small sample against the population. Further researchers are suggested to carry out an extensive study with a larger sample to avoid the far-reaching consequences of generalization problems. The generalization of the research findings will be limited to Sri Lanka. Nevertheless, research findings may not be valid in the context of other countries because ICT usage and business performances become to change with the different cultural backgrounds and socio-economic conditions as well as the bounded rationality. Future researches are suggested to carry out studies in

another region of the world with the different cultural and socio-economic background to know how empirical evidence differ from Sri Lanka.

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Factors Affecting Generation Y's Consumer Conformity Behaviour in Social Networking Sites; with Special Reference to Retail Fashion Industry in Colombo District, Sri Lanka

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Abstract

The development of social networking platforms on the internet tremendously impacts to the facilitation of global social interconnections. Consumers are influenced by a variety of social networks in which Facebook plays a major role. Considering the rising Gen Y's Social Networking Sites (SNS) involvement, modern fashion brands consider Facebook as a business take-off tool. Thus, the objective of this study was to investigate factors influencing Gen Y consumer conformity behaviour in SNS in the context of the retail fashion industry in Sri Lanka. A deductive, cross-sectional research inquiry was carried out using five independent variables, which equipped a field survey of (N=214) respondents belonging to Gen Y from the Colombo District, Sri Lanka. Research instrument of 32 items used in which the responses were ranked based on a seven-point Likert scale. Findings carry practical implications in focusing on the influential factors on Gen Y consumer conformity behaviour in SNS in driving retail fashion industry.

Keywords: - Consumer conformity, Generation 'Y', Retail fashion industry, Social Networking Sites (SNS)

1. INTRODUCTION

No denying is to be placed that globalization, internet and networking in the virtual spaces have changed the whole concept of a consumer. The modern technology has brought the consumer markets more collaborative, dynamic and tremendously interconnected over the years, that marketers and brand personnel had to initiate on researching about the new consumer behaviour in its new angle. As evidenced by many scholarly work consumer behaviour is considered as a lot more challenging field of study (Martinez-Ruiz & Moser, 2019) in the present context. In identifying and analysing the modern perspective of consumer behaviour as stated by (Schiffman, et al., 2010) a firm's marketing efforts and the socio-cultural environment plays salient roles. The socio-cultural environment has led to the creation of an inseparable relationship with the consumer today, making them identified and described as social beings. Individuals in their purchasing patterns and decisions are

highly influenced by the interrelationships they maintain or perceive with the outer society. Thus, consumers in general, rely highly upon the ideas, views and opinions of the social environment they associate with and gain satisfaction consciously or unconsciously through choices made in such manner. (Sages & Grable, 2008) further clarifying this situation suggest that incorporation of social norms and interpersonal considerations are considered as the forebear of behavioural intentions. Consumers, especially based in the Asian continent is well-known to have collectivist behaviour where social influence in buying decision making is more prominently seen and discussed (Kongsompong, et al., 2009).

This significant impact of interpersonal influence in product decision making is raised as a theoretically tested concept as consumer conformity behaviour. People try to follow the direction of others and abide with what significant others, falling into different valued referent groups in the society accepts and follows. During these engagements and decisions of consumers they show restraining behaviour to go against the community groups showing the importance they put on social influence in their product decision-making process. This self-restraint behaviour in everyday interactions manifested by qualities of obedience, self-discipline and politeness gives rise to the concept conformity (Schwartz, 1992).

Conformity, in general, is identified as the tendency of group members to establish group norms and the tendency of individuals to comply with respective group norms, susceptibility to group influence and behavioural changes in consumption behaviour (Lascu & Zinkhan, 1999). The consumer tends to succumb to the subjective norms (Schiffman, et al., 2010) and alters his behaviour according to the social identity he wants to form of himself which could be either higher or lower depending on the product or service, mind-set and the social background.

With the evolutionary expansions of the new digital world the consumer buying behaviour is highly discussed in relation to these online platforms where consumers no more need a 'marketplace' and fulfils all their needs from a 'market space'. In this digitalized world, the internet enables a massive number of individuals worldwide to exchange information, experiences and ideas at anytime, anywhere (Rothaermel & Sugiyama, 2001). This gives rise to virtual communities where people electronically communicate with each other while Social Networking Sites (SNS) play an important and major part of these virtual community communications. In a study conducted by Elhadidi in 2018, the research suggests that the high interactivity rates on Facebook and Twitter could be attributed to their ability to host discussions and controversies about things and events, to share information, and to internalize social values and identity (Elhadidi, 2018).

Demonstrating the impact of this digitalized 21st century, Sri Lanka records to have a 6.7 Million active social media user base from the total population of 21 Million, and among this portion, the majority belongs to the Colombo district, the western province of Sri Lanka (Social Media Stats Sri Lanka, 2020). Among other social networking platforms, Facebook claims to have the opportunity to satisfy all instrumental, ritualized and social interaction motives due to its characteristics that are sometimes unavailable in other social media platforms (Elhadidi, 2018).

The internet and social media usage when explored in a global context or even on a national ground many findings (Census and Statistics, 2019) highlight a special fact that age group of 25 to 34 years are the most active and engaging group in social media. According to the Department of Census and Statistics, people belonging to this age group records a 40.9% internet usage rate (Census and Statistics, 2019). This age group can generally be identified as the 'Millennials' as named by authors Strauss and Howe in 1987, as the high school graduating class of the millennium (Ikram, et al., 2019). As another finding of (Socialbakers.com, 2013), a study concerning Greece also found that among 4 Million Facebook users in the country the largest number of users fall into the age group of 25-34 years (Giota & Kleftaras, 2013).

With the emergence of businesses and industry expansions via social networking sites fashion industry seems as one such lucrative and live industry in Sri Lanka. Studies on the retail fashion-wear industry posit fashion retailing sector takes a larger portion (39%) which shows great possibilities towards further future growth. In the study conducted by Park in 2017, states that marketers have reported that current fashion consumers are inspired by other consumers' fashion styling shared on SNS and much more influenced by online influencers than commercial models (Park, 2017). And the researchers further identify that social needs have a higher potential to influence consumers in their shopping preferences presenting opportunities for businesses (Pentina, et al., 2008). Social groups influence the information need, purchase evaluation process and interests for fashion brands unlike the situation few years ago. The HubSpot report reveals that 71% of the consumers are more likely to make a purchase based on referrals (Ewing, 2012).

The lapses in the available literature in terms of clearly deriving influential factors and key aspects of such factors driving conformity behaviour at an considerable phase, made it worthwhile for the researcher to investigate factors influencing the consumer conformity behaviour in SNS specially on Gen Y with respect to the retail fashion industry forming its research questions as follows attending to examine the significance in e-WOM, FoMO, Sense of Belongingness, Community expertise and Public Self-consciousness on Gen Y consumer conformity behaviour.

1.To what extent e-WOM affect Gen Y consumers' conformity behaviour in social networking sites?

2.To what extent Fear of Missing Out (FoMO) affect Gen Y consumers' conformity behaviour in social networking sites?

3.To what extent Sense of Belongingness affect Gen Y consumers' conformity behaviour in social networking sites?

4.To what extent Community Expertise affect Gen Y consumers' conformity behaviour in social networking sites?

5.To what extent Public Self-consciousness affect Gen Y consumers' conformity behaviour in social networking sites?

The consumer conformity as a research area that has practical importance in the current marketing context has not been thoroughly examined in the Sri Lankan perspective of it. Thus, the researcher's main objective is to investigate the effect of factors emerged from past literature on the Gen Y consumer conformity in Sri Lanka. The empirical investigation into discovering the background and effect of consumer conformity resulted in portraying important findings. The scholars (Westbrook, 1987; Rahman & Mannan, 2018; Park & Lee, 2008; Carmicheal, 2020) identified that e-WOM has a significant influence on consumers to show conformity behaviour in SNS. Further, (Przybylski et al., 2013; Wegmann et al., 2017; Kang et al., 2019 highlights FoMo as a factor that consumers show a willingness to comply with group norms and conform with their social environment. The scholarly articles on the subject also identify as same as FoMo the Sense of Belongingness consumers expect through their interpersonal connections could also lead to having conformatory product choices (Witt, 1969; Park & Feinberg, 2010). Literature survey performed reflected insights from Community's expertise as drivers of consumer conformity behaviour at instances where they are rich in believablity and trustworthiness (Wood & Lynch, 2002; Kelman, 1961). Findings and the available relationships on these factors discussed compelled the researcher to develop the research model as shown below to test the effect of the factors emerged from past literature on the consumer conformity in the Generation Y in Sri Lanka.

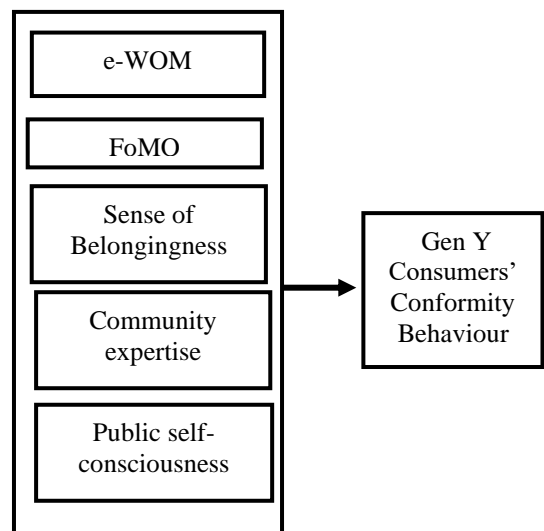Factors affecting Gen Y Consumer Conformity Behaviour

Figure 1: Conceptual framework

Based on the framework and empirical findings presented by literature review, the following five hypotheses were developed to address the research problem.

H1: e-WOM has a significant effect on Gen Y consumers' conformity behaviour in social networking sites.

H2: Fear of Missing Out (FoMO) has a significant effect on the Gen Y consumers' conformity behaviour in social networking sites.

H3: Sense of Belongingness has a significant effect on the Gen Y consumers' conformity behaviour in social networking sites.

H4: Community Expertise has a significant effect on Gen Y consumers' conformity behaviour in social networking sites.

H5: Public self-consciousness has a significant effect on Gen Y consumers' conformity behaviour in social networking sites.

2. METHODS

The research was carried out in the deductive approach employing survey strategy. The study was performed as a cross-sectional study where the unit of analysis was individuals who are Gen Y Facebook users. Determinants of Gen Y Consumer conformity behaviour denoted the independent variables where Consumer conformity was considered to be the dependent variable. Based on the presented conceptual framework, five determinants of consumer conformity behaviour were tested (figure 1). The target population of the exploratory study were the Gen Y population i.e.

people born between 1984 and 1995 (RetailWire, 2019) Facebook users in Sri Lanka. The researcher has selected the sample size as 250 in total that comprises of Colombo district Generation Y Facebook users that falls to different income ranges; the mechanism provided by Green was applied to derive the appropriate sample size (Green, 1991).

The variables and indicators relevant to the Gen Y consumers' conformity behaviour in social networking sites on retail fashion industry operationalized for the purpose of the study and a structured questionnaire-based survey was conducted to collect the required information from the respondents. The instrument consisted of 32 items representing demographic information, social media usage information and the five constructs e-WOM (Ismagilova, et al., 2019), FoMO (Wegmann, et al., 2017), Sense of Belongingness (Park & Feinberg, 2010), Community expertise (Piumali & Rathnayake, 2017) and Public Self-consciousness (Millan & Mittal, 2017). Responses were ranked based on a seven-point Likert scale where 1- "Strongly disagree", 2- "Disagree", 3- "More or less disagree", 4- ""Neutral", 5- "More or less agree", 6- "Agree" and 7 denotes "Strongly agree". 214 valid questionnaires (85.6% response rate) were used for data analysis. Further, descriptive statistical tools were used to analyse the data collected and the inferential statistical tools were used in testing the hypotheses of the study.

3. RESULTS

The data analysis performed resulted in an analysing the demographic information on the sample. As per data derived the majority of the Generation Y respondents in the sample were females who belonged to the age group of 25 to 29 years. Further, majority of the respondents were diploma/ degree holders who were employed in the private sector at the initial stage of earnings.

The social media usage behaviour and choices as analysed in the study depicted that most of the Gen Y respondents prefer Facebook and Instagram as social networking sites, and majority of them have been members on these social media platforms for more than five years having some experience regarding online fashion purchases.

The results of the regression analysis performed to test the hypotheses are illustrated as shown below.

Table 1: Regression analysis - model significance

Model	Sum of Squares	df	F	Sig.
Regression	27.721	5	60.530	.000[b]
Residual	19.052	208		
Total	46.773	213		

Source: Survey results

Table 2: Regression analysis - coefficients

Model	Standardized Coefficient	t	Sig.
	B		
(Constant)		7.462	.000
e-WOM	.273	4.210	.000
FoMO	.019	.329	.742
Sense of Belongingness	.097	1.608	.109
Community Expertise	.389	5.926	.000
Public Self-consciousness	.128	2.049	.042

Source: Survey results

The associations between independent and dependent variables were measured through the correlation test conducted.

Table 3: Correlation analysis

Variable	CC	e-WOM	FoMO	SB	CE	PSC
CC	1	.663**	.452**	.527**	.709**	.596**

** significant at 0.05 level

Consumer Conformity (CC), Sense of Belongingness (SB), Community Expertise (CE), Public Self-consciousness (PSC)
Source: Survey results

The hypothesis testing results upon regression analysis was as shown below in table 4.

Table 4: Summary of hypothesis test

Hypothesis	Beta value	Sig Value	Decision
H1: e-WOM	0.273	**0.000**	**Supported**
H2: FoMO	0.017	0.742	Not Supported
H3: Sense of belongingness	0.083	0.109	Not Supported
H4: Community expertise	0.389	**0.000**	**Supported**
H5: Public self-consciousness	0.128	**0.042**	**Supported**

Source: Survey results

4. DISCUSSION

Reliability and internal consistency of data were measured and illustrated using Cronbach's Alpha (Cronbach,1951; Santos, 1999), where all five independent variables having an Alpha value greater than 0.7 assured having higher effective internal consistency. The validity of the data set was ensured by the Pearson's Product Moment Value test and all 'rxy' values stating the relationship between each independent and dependent variable recorded values greater than Pearson's Product Moment value (Odom & Morrow, 2006).

A slight view of the sample was further emphasized in the descriptive analysis. It was evident that Community expertise as an independent variable has the highest mean of 5.65 while FoMO accounted as having the lowest mean of 5.23. However, all independent variables have a mean score greater than 5 and approaching 6 which denotes 'Agree' in the seven-point Likert scale used. Moreover, the standard deviation values for all independent variables has a value less than 01 (SD<1) implying all answers are relatively identical and distributed closer to the mean.

Table 5: Descriptive statistics

Variable	Mean
Consumer Conformity	5.7352
e-WOM	5.6273
FoMO	5.2395
Sense of Belongingness	5.4007
Community Expertise	5.6565
Public Self-consciousness	5.4124

Source: Survey results

As prerequisites of the regression analysis normality of the data distribution was tested using Skewness and Kurtosis indexes (Hair , et al., 2010; Byrne, 2010), where the dependent variable tends to satisfy normality requirements. Further the preliminary assumptions of the parametric statistical tools such as Homoscedasticity and Autocorrelation were tested. The results of the Breusch Pagan test assumed the data is free from heteroscedasticity issues, while Durbin Watson values obtained for all five independent variables of the study and the overall model suggested that data had no autocorrelation problems.

To identify the nature of relationship between independent and dependent variables researcher performed Correlation analysis. As presented in table 3, the correlation coefficient of e-WOM, FoMo, Sense of Belongingness, Community Expertise and Public Self-consciousness were 0.663, 0.452, 0.527, 0.709 and 0.596 respectively, delineating that all five variables possess statistically significant associations with Gen Y consumer conformity behaviour.

Simple regression analysis was performed in order to illustrate the impact of each independent variable with the dependent variable consumer conformity behaviour in SNS.

Regression analysis was conducted to test the research hypotheses formulated and the generated result is presented in table 2 To check the multicollinearity, the study estimated the Variance Inflation Factor which ranges well below the critical value

10 where multicollinearity was not present.

The explanatory power (R^2) of the model was 59.3%. Accordingly, 59.3% of the influential factors on consumer conformity is developed by the model developed. Based on the results only e-WOM, Community expertise and Public Self-consciousness were significant at 0.05 level and posited significant positive effect on the dependent variable consumer conformity behaviour. Thus, alternative hypotheses formed with regards to these three independent variables were accepted. However, FoMO and Sense of Belongingness as independent variables have been statistically insignificant in the Sri Lankan context when explaining consumer conformity; hence the alternative hypothesis for the two independent variables was rejected as per model results. The hypothesis testing results as a summary is illustrated in table 4.

The findings of the statistical analysis matched with few previous literatures. In the study of (Park & Feinberg, 2010) Sense of belongingness and Community expertise were statistically significant in explaining consumer conformity in virtual worlds. Further in the study of (Piumali & Rathnayake, 2017) as the only other study that explored conformity behaviour in the Sri Lankan context, Sense of Belongingness and e-WOM and Community Expertise was identified having a positive impact on consumer conformity. However, in the current study, the alternative hypothesis on

Sense of Belongingness was rejected on the Gen Y consumers' context in SNS in the fashion industry. Further comparing previous findings, Public Self-consciousness was also accepted as having significant relation with the socio-cultural influence in conformity form in the studies of (Tussyadiah, et al., 2015; Zhou, et al., 2008) as same in the current study. Additionally, it was that FoMO in the current study's context is incapable of explaining Gen Y consumers' conformity behaviour in SNS in the selected context. However, FoMO was accepted as a significant variable in the study of (Kang, et al., 2019) in creating susceptible behaviour among consumers.

5. CONCLUSION

The study aimed at exploring the factors influencing the Gen Y consumer conformity behaviour in SNS with respect to the retail fashion industry in the context of Western province, Sri Lanka. The study results ended up concluding that e-WOM, Community expertise and Public Self-consciousness are determinants of Gen Y consumer conformity behaviour in SNS pertaining to the retail fashion industry involvement in Sri Lanka as proved by the multiple regression analysis.

The findings carry important theoretical implications in clarifying and explaining the concept of consumer conformity in the constructed new model with relation to the most involved and discussed generational cohort Gen Y. The study generates empirical evidence for confirming three Consumer

conformity variables of e-WOM, Community expertise and Public Self-consciousness. Further, this study fills the gap of consumer conformity studies for Gen Y in the Sri Lankan context with the retail fashion industry. The practical implications of the study highlight the necessity of encouraging and creating positive -WOM and concentrating more on promoting and managing reviews. Further, it was recommended to improve trustworthiness and argument quality through the transparency of information shared in virtual communities.

Moreover, by customizing communication messages to improve self-presentation and recognition was suggested as boosting consumer engagement with fashion brands backed by a conforming mindset. The principal limitation of the study was the inability to access sound empirical evidence on the subject area, which might have caused in poor research arguments. In addition, the study suffered from limitation in focusing only on the fashion industry and the chance for consumers to have changing perceptions on the subject which could have affect results. However, the study provides a stepping ground for future research in consumer conformity in the Sri Lankan context with an industry overview taken. It is recommended to conduct studies with extended research models beyond the proposed research model supported by more advanced research techniques and statistical analyses.

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Consumer's Green Product Buying Decision: Impact of Selected Factors

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Abstract

In recent years the concern on environmental issues have become more prominent in both global and local presence. Consequently, the consumers are also paying more attention on environmental products with the increase of environmental awareness. As there is an emerging market segment for green product of Fast Moving Consumer Goods (FMCG) sector in Sri Lanka, marketers could attain the competitive advantage by targeting on this emerging market segment. Consumers have realized that their consumption activities may result in environmental deterioration, which, in turn, may transform and motivate them in making ecologically conscious purchases such as green buying. Consequently, businesses have begun to modify their behaviour in an attempt to address environmental and social issues as a way of their social responsibility and attract consumers towards green products and promote environmental sustainability. The present study was designed to explore how far environment consciousness, eco labeling and green advertising impact on consumer's green product buying decision. Accordingly, 384 respondents of 20-59 age range were selected by convenience sampling method and a structured questionnaire with 23 questions is used to collect data. In this context, results revealed that, green product buying decision was significantly influenced by environment environmental consciousness, eco labels, and green advertising. In practice, marketers of the green products might focus on marketing in order to communicate and enhance the awareness on green product and consumer's environmental concern which might tap the consumers' mindset to prefer the green products. Further Implication of the study might be useful for policy makers to provide incentives to green products manufacturers who are truly green in their manufacturing processes.

Keywords-: Environment Consciousness, Eco Labeling, Green Advertising, Green Product

1. INTRODUCTION

Recently, the environmental concern had become an emerging trend due to the massive exposure to environmental problems. According to Moisander (2007) socially responsible consumers are consumers who consider about the public consequences emerged as a result of their private consumption, and attempt to use their purchasing power to bring a social change. Further in aligned with previous studies the majority of consumers have realized that their purchasing behaviour has a direct impact on many ecological problems (Han, Hsu, & Sheu, 2010).

Moreover, consumers make an effort to familiarize this new threatening situation by considering environmental issues and purchasing more ecologically compatible products or green products. According to Chen and Chai (2010) a green product is a product which has minimum impact on environment and it incorporates these strategies with recycled materials, reduced packing and using less harmful substances. Further green products may satisfy the consumers' needs, preserve the environment and by extension, contributing to sustainability (Joshi and Rahman, 2015).

According to Samarasinghe (2012) as many Asian countries suffering from increasing level of toxic waste, exposure to severe road traffic noise high level of garbage disposal and lessening landfill space in the most of the urban areas. Sri Lanka as an Asian country also experiencing these environmental issues.

It is noticeable that some business sectors like Apparel, Hotel and Tourism and Consumer Goods industries have been adopting eco-friendly business initiatives Samarasinghe and Samarasinghe (2013). Further they stated that, Fast Moving Consumable Goods (FMCG) sector has the large contribution in to the economy and closer to Sri Lankan consumer's day-today lives. Moreover, Samarasinghe and Samarasinghe (2013) stated, that the FMCG sector of the country is concerning about the green marketing issues by incorporating green elements into their marketing mixes as a competitive tool.

Tan, Ojo & Thurasamy (2019) stated that Consumers have reportedly realized that their consumption activities may result in environmental deterioration, which, in turn, may have transformed and motivated them in making ecologically conscious purchases such as green buying.

Sri Lanka is as Asian society, its environmental quality lags and consumerist movement far behind when compared to the developed countries. But now research evidence suggested that citizens in Asian societies are increasingly becoming conscious of alarming environmental problems. Government policies and business strategies in many Asian countries are being reshaped to give more consideration to long-term sustainable development including environmental protection (Johri and Sahasakmontri, 1998).

Although the term 'green products' had higher attention of people, the real factors affecting green

purchasing decisions in the Sri Lankan context are not yet discovered empirically. So the study was conducted to achieve following objectives,

1. To examine how far consumers' environmental consciousness influenced on green product buying decision
2. To examine how far eco labeling impact on green product buying decision
3. To examine how far green advertising impact on green product buying decision
4. To examine the combined effect of environment consciousness, eco labeling and green advertising on consumer's green product buying decision.

Green product purchase decision revolves around environmentally concerned consumers who take into account the public consequences of their private consumption behaviour and attempt to use their buying decision to bring about changes (Lai and Cheng, 2016).

The theoretical frame work is supported by two very related theories as Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB). TRA model stated that attitude is not necessarily determine the behaviour but it was the intention to determine the behaviour. Ajzen, and Fishbein, (1977).

The TPB is an extension of the TRA and The TPB differs from the TRA since it includes perceived behavioural control (Ajzen, 1991).

As stated by Tan, Ojo & Thurasamy (2019) the buying decision of green products depends on the consumer's intention to purchase environmentally-friendly products, while avoiding negative impact the environment. Specifically, the consumer's intention maybe conveyed as the willingness to purchase green products. Further Ramayah et al. (2010) explained, intention can be considered as the motivational factors, which may influence consumers' behaviour towards buying/purchasing green products. Moreover, explained purchasing behaviour of green products entails a complex form of ethical decision-making, which requires consumers to act in a socially responsible way when buying products.

Environmental consciousness reflects an individual's knowledge about environmental issues and the impact of environmental-friendly practices in curbing such issues (Boztepe, 2016). In the study of Tan, Ojo & Thurasamy (2019) stated that environmentally conscious consumers are more likely to indicate protective feelings towards the environment. Therefore, they are willing to change their consumption behaviour to minimize the adverse impact of their actions on the environment, further conceptual model Tan, Ojo & Thurasamy (2019) suggested that environmental consciousness has a significant impact on green product buying decision

In consistent with previous literature as consumers become more aware of

the adverse impact of non-sustainable consumption on the environment, they adjust their actions by engaging in environmental protective behaviour. Accordingly, environmental consciousness can influence green buying behaviour among consumers by stimulating them to be socially responsible towards the environment. Hence, the following hypothesis is formulated:

H1: Environmental consciousness, has a significant impact on consumer's green product buying decision

Environmental labels are increasingly being utilized by marketers to promote the identification of green products D'Souza et al., (2006). They stated Eco-label accomplishes two main functions for consumers as information function and value function. Information function that informs them about intangible product characteristics such as product's quality and value function which provide a value in themselves. In the study of Rahbar and Abdul Wahid (2011) Eco label and purchasing behaviour is found to be significant, further Tan, Ojo & Thurasamy (2019) also suggested that impact of eco label was significant on purchasing behaviour. The discussion in the foregoing, led to the formulation of the following hypothesis.

H2. Eco-label has a significant impact on consumer's buying decision of green products.

The objective of green advertisements is to influence consumers' purchase behavior by encouraging them to buy products that do not harm the environment and to direct their attention to the positive consequences of their purchase behavior (Rahbar & Abdul Wahid, 2011). According to Phau and Ong (2007), consumers did not only respond to green advertising but also assess the credibility of the advertised brand, further way that message is communicated may effect on the response for advertisements. Mathur and Mathur (2000), stated that credibility of the message may increase the environmental conscious image of the advertisement. Consequently, the following hypothesis is proposed

H3. Green advertising has a significant impact on consumers buying decision of green products

Finally, altogether the study tested how far impact of all the selected factors on green product buying decision.

H4. Environmental consciousness, Eco - Label and Green advertising have significant combined impact on consumer's green product buying decision

Drawing insights from the literature conceptualize that consumers' buying decision of green products largely depends on their environmental consciousness, and key marketing tools such as eco-labelling and advertisements on green products.
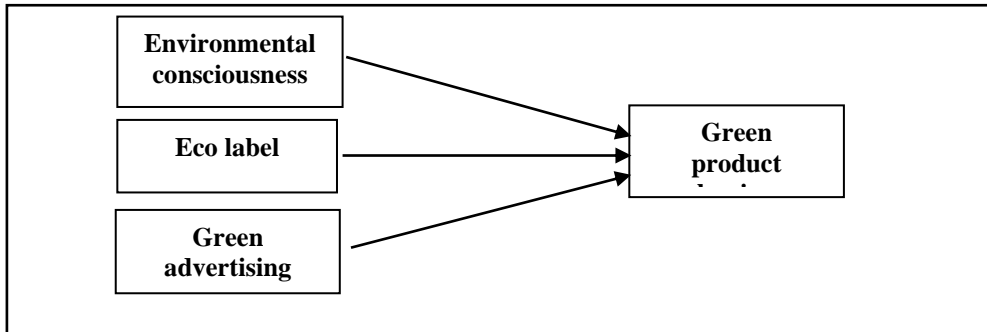
Figure 1: Conceptual framework

2. METHODS

The descriptive research design was adopted for the study. The type of the research was deductive and variables were measured with the quantitative analysis. Population was counted as 13,28,654 out of 20-59 age range (Department of Census and Statistics, Sri Lanka, 2012). And 384 respondents are drawn from Colombo district using the convenience sampling technique (Krejcie & Morgan,1970). A structured questionnaire with 23 questions was used to collect data by five-point Likert scale to measure the variables under each question from 1 to 5 (1 =strongly disagree, 5 =strongly agree).

384 questionnaires were returned and considered for the analysis. Pearson correlation was used find the association between dependent and independent variable; multiple regression analysis was utilized to test the hypothesis developed in the study. Further Cronbach Alpha reliability test conducted with SPSS in order to measure the internal consistency of the questionnaire.

3. RESULTS

Sample profile summarized as majority of respondents were female respondents 55.2% out of total of 384, whereas 44.8% respondents are male. With regard to age group more than 45% (45.6%) of respondents are aged 20-29 years old. Respondents who represents age of 50-59 were the least representative age category which was only about 24 and 6.3% out of 384 respondents. In addition, the respondents who were categorized under age of 40-49 represent 55 respondents and 14.3percent out of 384.

Majority of the respondents are holding a bachelor's degree, they are about 195 and 50.8 percent out of total 384. 72 of the respondents have only advanced level and they are about 18.8% out of total sample. 56 of them are having diploma and 61 of respondents are holding Masters, respective percentage of them are 14.6 and 15.9. Respondents who occupied as executives are about 246 and represents 64 percentages and 75 of respondents are occupied under manager and above level and

represent 19.5 percentage. 47 of the respondents are trainees and 16 are students with respective percentages of these two groups as 12.2 percent and 4.2 percent.

The overall reliability of the variables was tested with Cronbach alpha value which was greater than 0.7 (0.907) Therefore all variables related to this study were reliable to conduct study. The degree of association between independent and dependent variable was tested with linear correlation and results are depicted in the table 01. Pearson Correlation coefficient of the variables were reported respectively as environmental consciousness 0.677, eco labels 0.715and green advertising 0.624. According to

Multiple regression analysis was used in the present study to determine the impact of critical predictors on the buying decision of green products, as well as to test the five hypotheses. The results of the multiple regression analysis were presented in the tables below.

The overall test results (Table 04) of the regression model suggested that overall regression model was statistically significant(p<0.05). Further it indicated that Environmental consciousness, Eco - Label and Green advertising have significant impact on consumer's green product buying decision and hence H4 was supported.

Gogtay and Thatte (2017), if correlation coefficient lies between +0.5 and +1 that indicates there is a positive strong relationship between two variables. As the P value was lesser than 0.05 all three variables study concluded that there is a significant relationship between each independent variable and dependent variable.

Table 1: Correlation results

Predictors	Pearson correlation	sig (2-tailed)
Environmental consciousness	.677	.000
Eco label	.715	.000
Green advertising	.624	.000

Source: Survey data ,2020

The adjusted R^2 value of 0.610 (Table 03) indicates that all the supported factors account for about 61 per cent variance in green product buying decision, with eco-label was the most significant predictor.

By examining the significance of the parameter estimates, the present study tested the hypotheses underpinning the research model. As shown in Table 04, the effect of environmental consciousness was significant on buying decision (b = 0.313., $p < 0.05$). Therefore, H1 is supported. Moreover, eco label was significant on buying decision (b = 0.370, p< 0.05), and green advertising significant on buying decision (b = 0.218, $p < 0.05$) therefore H2,H3 also support.

Table 2: Model Summary

Model	R	R square	Adjusted R square
1	.783	.613	.610

Source: Survey data, 2020

Table 3: ANOVA

Model	f	sig
1 regression	200.685	.000
residual		
total		

Source: Survey data, 2020

Table 4: Coefficients

Model	Standard Coefficient d	Sig
constant		.000
Environment consciousness	0.313	.000
Eco label	0.370	.000
Green advertising	0.218	.000

Source: Survey data, 2020

4. DISCUSSION

This study investigates the factors of green products buying behaviors among a sample of consumers in Sri Lanka. The regression results suggested consumers' environmental consciousness, eco-label, and advertising positively impact on buying decisions of green products. In consistent with the research study of Tan, Ojo & Thurasamy (2019) suggested effect of environmental consciousness was significant on buying decision.

In line with the literature, eco-labelling has the most significant positive impact on young consumers buying decision of green products. This indicates a strong interjected motivation among the young consumers, where in, eco-labelling reminds them about environment-friendly purchasing, which may create the feeling of guilty if they do not buy green products (Ritter et al., 2015).

Findings of the present study determined there is significant impact of green advertising on consumers' buying decision of green products. This aligns with the Phau and Ong's (2007) findings on the importance of advertisement in stimulating consumer's interest towards buying green products. But according to Rahbar & Abdul Wahid (2011) Environmental advertisement is also another dimension of green marketing tool that is not significant with purchase behavior. Further Kilbourne (1995) suggested one of the factor contributing to the failure of applying environmental advertisements is due to low credibility of green advertisements among consumers.

5. CONCLUSION

Sri Lankan consumers possess environmental consciousness and they actively support the environment by purchasing and consuming products which are known to be environmentally friendly, this was supported by accepting H1, Consumers environmental consciousness have significant impact on green product buying decision. According to the findings of the present study Eco label is the highest influential variable that impact on green product buying decision. FMCG companies could use eco-labels as tools to indicate and communicate the environmental performance of a product with the aim of supporting consumer decision-making for environmentally friendly products, by providing transparency and enhancing trust in the environmental identities of products. Further it is evident from the findings of the study that the fundamental purpose of green advertisements is to offer green product experience to consumers, and it motivates consumers to be aware and owe the product. Finally, the study provides evidences for, Marketers in FMCG industry to enhance the green product experience of consumers by understanding impact of consumers environment consciousness, Eco labeling efforts and advertising efforts towards the buying decision of green product

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The Impact of Talent Management on Non-managerial Employees' Retention in the Private Commercial Banking Sector of Sri Lanka

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Abstract

The functioning and long term survival of any organizations highly depends on several factors. Attracting and retaining the best talented employees is a key factor to ensure the accomplishment of organizational goals. Nowadays, most of organizations pay little attention on the retention of employees than attracting them. As a significant determinant for achieving organization's goals, this study is to discuss the impact of Talent management on Non managerial employee retention in private commercial banking sector, Western province of Sri Lanka. According to the previous studies researchers proved that generally private sector employees enjoy more financial and non-financial benefits rather than state sector banking employees. But employee retention in private commercial banking sector lower than state banking sector. This reason was root factor to study the employee retention in private commercial banking sector. Further this study was focused on Non managerial employees in private commercial banks since they are the drivers of daily operations of banks. Further, their employee turnover is greater than Managerial level employees. The main objective of this study is to investigate the impact of Talent management on Non managerial employee retention. The study problem is to identify the impact of Talent management on Non managerial employee retention in private commercial banking sector of Western province in Sri Lanka. The data were collected by distributing a structured questionnaire from the convenient select sample of 375 of non-managerial employees in private commercial banks, Western province of Sri Lanka. The data were presented and analyzed using SPSS version 20.0. The Pearson product movement correlation analysis and least square linear regression analysis analyzed the data over which the hypothesis were tested. The findings of the study indicated that Talent management function positively correlated with non-managerial employee retention in private commercial banks and based on study findings and previous literatures study concluded that Talent management is a significant factor that considerably effect on employee retention.

Keywords:- Employee Retention, Non- Managerial Employees, Private Banking Sector, Talent Management

1. INTRODUCTION

The Banking sector in Sri Lanka is the foundation of county's financial system and nowadays both private and government commercial banks represents 48.1% contribution to the county's financial system. The banking sector was originated in Sri Lanka when the country was under the colony of British. However today, banking sector of Sri Lanka comprises with 25 licensed commercial banks including 12 branches of foreign banks and 7 licensed specialized banks. Western province of Sri Lanka can be identified as the most economically developed and populated part and more than 50% of contribution to the GDP represented by Western province. This study has focused 15004 of Non managerial employees in private commercial banks of Western province in Sri Lanka. .

According to Walker (2001) in today's competitive business world attracting and retaining the best talented employees are the most challengeable issue that every manager faces. Nowadays employees in the organizations expect variety of things rather than only salary. Employees are satisfied when they have better working environment, good stream relations, career growth opportunities, recognition, rewards etc. As well as today's most of the organizations pay little attention on retaining employees rather than attracting them. As a result organizations have to incur more time and cost to attract suitable freshers and after that they pay little attention to retain and manage their results. Accordingly organizations are suffering a problem of employee turnover. Both private and government banks are also suffering a problem of employee turnover and this is a most common issue specially in private commercial banking sector in Sri Lanka. Since the banking sector shows the high employee turnover due to various reasons, banks are in the process of implementing talent management practices such as talent acquisition, talent development and use different compensation strategies to satisfy their employees. According to the view of Healthfield, M. (2019) employee recruitment and investment on training and development are dimensions of talent management. By analyzing the data relating to the employee recruitment and investment on training, it is noted that all commercial banks are highly involve in talent management practices. They increase cost and time for the progression of their employees year by year.

It is significant to study the impact of implementing talent management practices on employee retention in private commercial banking sector. Accordingly it is proved that there is impact of talent management on employee retention. Hence researcher attempts to investigate the impact of talent management practices on non-managerial employee retention in private commercial banking sector of Western province in Sri Lanka. In Sri Lankan context there is empirical and knowledge gap about the impact of talent management on non-managerial employee retention in

private commercial banking sector. Therefore this study conducted to investigate whether there is a relationship between talent management and non-managerial employee retention in private commercial banking sector and main objective of this study is to investigate the impact of talent management on non-managerial employee retention. According to the view of Cobb (2008), competitive market place continues to make talent since it is the primary drive for organizational success. Indeed organizations should establish its core competencies in talent attraction, development and employee retention not just the envy of its rivals, but it guarantees the stability and success of organizations (Silvia, K. 2016).

Talent Management is a conscious, deliberate approach adopted by the organizations to attract, develop and retain people who possess right competencies, attitudes and aptitude to meet the strategic objectives of the organizations (Stockly, 2007). Employee retention is concerned with keeping or encouraging employees to remain in an organization for a maximum period of time (Kossavi, et al., 2016). Herman & Gioia (2001), indicated losing employees is a cost and that directly or indirectly affect for the business as it causes instability in work force, results in reduced productivity, lower effectiveness and which leads to reduce employee morale also. Hence employee retention is the most significant factor and Silvia, K. (2013) has found talent management practices stimulate employee retention specially in banking sector.

The rationale behind this is employees who are provided opportunity for career development and professional developments are likely to buildup long-term relation with the organizations. If the employees are satisfied with the organization's culture, policies and procedures in this case employees will never find another place for new careers. In this situation organization's employee retention will be protected. Accordingly employee talent management can be recognized as an employee retention strategy.

2. METHODS

The objective of the present study was to investigate the impact of talent management on employee retention. To accomplish that purpose researcher has used two variables independent variable and dependent variable. The independent variable is associated with four dimensions as talent acquisition, talent development, succession planning (Kigo, 2016) and rewards and compensation strategies (Cheng, et al., 2017).The following figure shows the theoretical framework of the study.
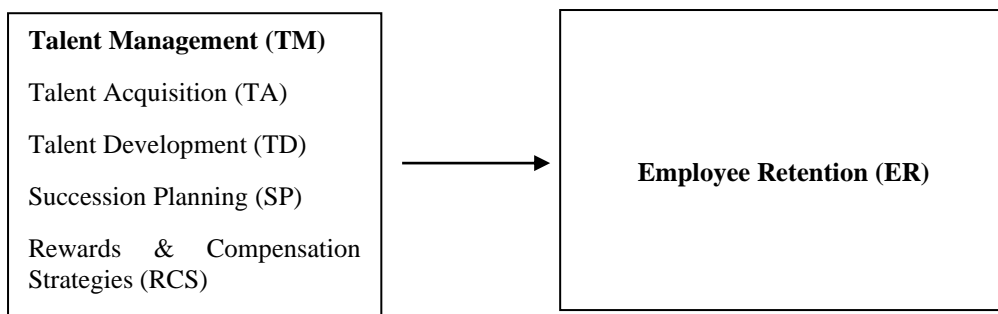
Talent Management (TM)	
Talent Acquisition (TA) Talent Development (TD) Succession Planning (SP) Rewards & Compensation Strategies (RCS)	Employee Retention (ER)

Figure 1: Schematic diagram of theoretical framework

In this study researcher has used descriptive research procedure and 375 non managerial employees in private commercial banks were selected as the sample through convenient sampling method. As well as the collection of data was done through a structured questionnaire with five points likert scale from strongly disagree to strongly agree. The questionnaire was consisted with 39 questions under five variables (TA, TD. RCS, SC and ER). Both instruments reported high internal consistency (Cronbach Alpha values: Talent Management scale = 0.803 and Employee Retention scale = 0.792). The cross-sectional study gathered data through a field survey. The data analysis of this study involved descriptive statistics for measuring demographic factors. Correlation analysis and regression analysis used to investigate the impact of talent management on employee retention and to identify the association between those two variables.

3. RESULTS

According to the results of demographic factors, 58.7% of gender dominated by male, age category 42.4% was dominated by

age group 40- 49.under the category of service period 44.8% were dominated by 4-6 year service period and based on the administrative job title 80.3% were on the executive category and 85.6% were married respondents. The proposed associations in the research model were tested using Pearson correlation analysis and following table 1 shows the results of the analysis.

Table 1: Pearson correlation

	ER	TA	TD	RCS	SP
Emloyee Retention	1	.691	.522	.558	.266
sig.(2 tailed)		.000	.000	.000	.000
N	375	375	375	375	375

Source: Survey data,2020

According to the results of Pearson correlation analysis it represents all factors are positively correlated with employee retention. Pearson correlations were 0.691, 0.522, 0.558 and 0.266 for TA, TD, RCS and SC respectively. All p values regarding

to all variables are less than significance level (Sig. level is 0.05).Accordingly correlations between TM functions and ER can be recognized as statically significant.

The table 2 shows the coefficient determination of the model.

Table 2: Goodness of the fitted model

R	R square	adjusted R square	std. error of the estimate	Durbin Watson
.712	.508	.502	.298	2.118

Source: Survey data, 2020

According to this $R^2 = 0.508$ and it describes 51% of variation in employee retention is explained by the talent management functions. Durbin Watson statistics always have a value between 0 and 4 and the value is 2, it can be identified that, there are no autocorrelation within the sample of the study. Here this value is 2.118

and its round up value equals to 2. Hence researcher can prove that there was no "autocorrelation" in the sample.

The developed hypotheses were tested based on the outcomes of regression analysis. Results can be indicated in following table 3.

Table 3. Coefficient table

Variable	beta (β)	p value	95% confidence interval for b	
			lower bound	upper bound
constant	1.297	0.00	.984	1.610
TA	0.578	0.00	0.480	0.676
TD	0.380	0.00	0.376	0.675
RCS	0.287	0.001	0.126	0.448
SP	0.173	0.00	0.094	0.253

Source:Survey data, 2020

According to table 3 results can be interpreted as follows.
H_1: There is a significant effect of talent acquisition on employee retention in private commercial banking sector of Western province in Sri Lanka. According to the results of regression analysis beta value was 0.578 (β =

0.578) and there is no value between lower bound (0.480) and upper bound (0.676) in confidence interval. Hence it is statistically significant at 95% confidence level (p = 0.000). Hence H_0 is rejected since r ≠ 0 and p < 0.05. Accept H_1. Finally it can be concluded that there is a significant

positive effect of talent acquisition on employee retention.

H_2: There is a significant effect of talent development on employee retention in private commercial banking sector of Western province in Sri Lanka

According to the results of regression analysis beta value was 0.380 (β = 0.380) and there is no value between lower bound (0.376) and upper bound (0.675) in confidence interval. Hence it is statistically significant at 95% confidence level (p = 0.000). Hence H_0 is rejected since r $\neq$ 0 and p < 0.05 Accept H_2. Finaly it can be concluded that there is a significant positive effect of talent development on employee retention.

H_3: There is a significant effect of rewards and compensation on employee retention in private commercial banking sector of western province in Sri Lanka. According to the results of regression analysis beta value was 0.287 (β = 0.287) and there is no value between lower bound (0.126) and upper bound (0.448) in confidence interval. Hence it is statistically significant at 95% confidence level (p = 0.001). Hence H_0 is rejected since r $\neq$ 0 and p < 0.05 Accept H_3. Finaly it can be concluded that there is a significant positive effect of talent development on employee retention.

H_4: There is a significant effect of rewards and compensation on employee retention in private commercial banking sector of Western province in Sri Lanka According to the results of regression

analysis beta value was 0.173 (β = 0.173) and there is no value between lower bound (0.094) and upper bound (0.253) in confidence interval. Hence it is statistically significant at 95% confidence level (p = 0.000). Hence H_0 is rejected since r $\neq$ 0 and p < 0.05 Accept H_4. Finally it can be concluded that there is a significant positive effect of succession planning on employee retention.

4. DISCUSSION

The main purpose of this study was to investigate the impact of talent management on employee retention. To accomplish that purpose researcher selected private commercial banking sector in Sri Lanka and study was limited to western province. The independent variable of the study is talent management and it consists with four dimensions as talent acquisition, talent development, rewards and compensation strategies and succession planning. The dependent variable of the study is employee retention. Based on the findings of the study researcher found that there is a positive impact of talent management on employee retention. In addition to that many researchers have found that there is a positive effect of talent management on employee retention.

The study done by Silvia, K. (2013) has proved that there is a positive impact of talent management on employee retention. Kigo, G. (2016) has conducted a study relating to the talent management. The study revealed that talent acquisition positively effect on employee

retention. The researcher present study also found that the positive impact of talent acquisition on employee retention. Cheng, et al., (2017) indicated rewards and compensation strategy positively effect on employee retention and current study findings also proved that argument. Further the impact of succession planning employee retention was positive. Basit Javed & Mohammad (2019) proved that the positive impact of succession planning on employee retention. Accordingly based on the study findings and literature, researcher can strongly prove that the positive impact of talent management and its functions on employee retention.

Further, in order to encourage talent management functions in banking sector banks need to enhance their awareness regarding their employees. To recruit talented qualified employees banks can get the support of recruitment agencies for the effective employee selection process. At the same time banks need to put more aware to recruit diversified employees rather than traditional skilled employees. As well as bank can increase their investment on training and development programs, community development programs and other employee welfare programs in order to raise employee motivation, commitment, more engagement and ultimately employee satisfaction. Satisfied employees are more productive than normal employees and they have more loyalty for the job and the organization. Accordingly satisfied employees stay longer period of time and these employees protect the

employee retention of the organizations.

As well as there were some limitations throughout the whole research process and one of them was the constitution of the sample which has been used by the researcher. Respondents were not randomly selected from the large population and some respondents may not paid full attention for the study questionnaire. Apart from that confidentiality information, personal bias, tendency to give responses that are socially desirable by the participants were other common limitations.

Furthermore, future researchers can conduct their studies regarding the study area of talent management by considering other aspects such as organizational performance, job satisfaction, and employee engagement etc.

5. CONCLUSION

The present study was designed and conducted to investigate the impact of talent management on non-managerial employee retention in private commercial banking sector of Western province in Sri Lanka. Accordingly, this research finding will be helpful for whole banking sector not only for private commercial banks in western province in order to identify which aspect to talent management initiatives effects on bank's employee management. Creating better talent management procedure is a long term investment and which ensure the stability and long tern survival of the

business organizations. Talent management address the human capital of the organizations and humans are the heart of any organizations. As well as long term survival of talented employees is the key factor of determination of organization's success. Further long term survival of employees ensure the favorable employee retention rate. Accordingly present study has focused on non-managerial employees in private commercial banks and non-managerial employees are drivers of daily operations of banks. Therefore, their satisfaction is compulsory to ensure their retention. Further it can be noted that the talent management functions are not only factor of determining employee retention and it may be affected by other several personal factors of employees and can prove that talent management functions have considerable amount of positive influence on employee retention. Accordingly based on the study findings and previous literature proved that there is a significant positive impact of talent management on employee retention. Therefore finally it can be recognized that there is a significant positive impact of talent management on non-managerial employee retention in private commercial banking sector of Western province in Sri Lanka.

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The Relationship Between Green Human Resource Management and Environmental Sustainability: A Case Based on State Commercial Bank in Matale District

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Abstract

Green Human Resource Management (GHRM) has emerged from the participation of companies in environmental conservation activities and ecological balance maintenance. Today, this subject is considered as an evolving and timely topic in Sri Lankan enterprises. But the public banking industry in Sri Lanka is not used much Green HRM practices when considering with private banking industry. This paper aims to find out the relationship between Green HRM & Environmental Sustainability in Bank of Ceylon in Matale district. Furthermore, this study aims to identify the Green HRM functions which they follows. This study was conducted by using 40 managerial employees in fourteen Bank of Ceylon branches in Matale district. This research endowed with exploratory study design pattern and quantitative research approach. Data was collected by survey method. When considering the results, Environmental Sustainability has a positive relationship with Green Job design, Green Recruitment & Selection and Green Training & Development. But the Green Performance & Reward Management has a negative relationship with Environmental Sustainability.

Keywords -: Green HRM, Environmental Sustainability, Green HRM functions, Public banking sector

1. INTRODUCTION

Environmental issues (Climate change, global warming, environment pollution, energy crises, etc.) are becoming more concern around the world today. This situation requires the contribution of all individuals and organizations to tackling issues and challenges in a sustainable way (Arulrajah *et al*, 2016). Rising seas and increased coastal flooding, more destructive hurricanes, frequent and intense heat waves, widespread forest death, increased health impacts, heavier rainfall and floods, more severe droughts in some regions, increased pressure on ground water supplies, changing seasons, melting ice, food supply disruptions; all are the phenomena of the impact of global climate change. The Great Barrier Reef, Glacier National Park, The Dead Sea, The Amazon, Yamal Peninsula, Maldives, Indonesia are

the factual example of the climate change effect (Islam *et al*,2019).

Environmental concerns, ecological balance and environmental protection have become topics for debate across the globe. Organizations as well as consumers have recognized the value of the environment for human survival. Many companies are being used in the present era to operate their business in a green manner and the use of Green HRM is also noteworthy in various organizations. In the twentieth century, Green HRM was the new research area in the organizational analysis.

Green HRM may help to reduce the harmful carbon. That directs the company to use fewer papers and so on. Green HRM is an important technique for making the company and its resources sustainable. Green Human Resources means putting into action and improving employee understanding and confidence at any level of the enterprise on sustainability. Researchers found that various business and non-business organizations took green measures to rebuild their companies and seek to protect the environment from catastrophic effects (Islam *et al*, 2019).

Green HRM includes environmentally sustainable human resource strategies and activities adopted by companies to accomplish their basic objectives and priorities by reducing the adverse effects of the environment arising from the organization's policies and behavior (Uddin & Islam, 2015). Environmentally friendly human resources allows public organizations

to develop commitment to environmental sustainability by concentrating on green practices such as waste management, recycling, carbon footprint reduction and the use and manufacture of green goods (Ahmad, 2015).

Companies are implementing EMS (Environmental Management System) a strategic tool, to gain competitive advantage. This system provides better control of firm's environmental impacts. It includes commitment, policy, planning, implementation, measurement and evaluation, review and improvement of HR systems that fit with organization's culture and long-term goals. Improved employee morale, stronger public image, increased consumer/customer confidence, employee loyalty and brand recognition, position as an employer of choice, increased workforce productivity, efficiency, motivation and employee retention are few of the many advantages and benefits an organization can have by implementing and developing such Green HRM techniques (Jessy, 2017)

1.1 Research Problem

Banks have a very important role to play in nation's economic growth. Encouraging environmentally sound expenditure and lending must be the bank's responsibility. Banks should promote environmentally friendly products, processes and technologies which reduce environmental carbon footprint (Shaumya & Arulrajah, 2016). Green HRM practices in a bank involves undertaking environment friendly HR initiatives resulting in greater efficiencies, lower

costs and better employee engagement and retention, which in turn, help organizations to reduce employee carbon footprints by teleconferencing and virtual interviews, recycling, telecommuting, online training, energy-efficient office spaces (Kusumanchi, 2019).

The concept of environmental sustainability has drawn eminently concern regarding corporate stability in the world (Jackling, 2000). After the beginning of the philosophy sustainability, several companies have developed environmental management programmes, policies and techniques to protect the environment (Noronha *et al*, 2016).However, it is the realization of organizations that, taking care of the environment is beneficial not only to the environment but also to the organizational growth and employee well-being (Likhitkar & Verma, 2016).They concentrate on integrating human resource management strategies, programmes, processes and environmental protection activities (Haddock-Miller *et a*l, 2016).

Despite gaining position in the literature and its increasing application as a remedy for environmental degradations in many organizations (Sharma, 2016). In many countries and especially in public organizations, Green HRM is still a new phenomenon (Freitas *et al*, 2012). It is imperative that Sri Lanka understand the concept of green to face the 21st century's most critical yet private challenge, which is the transformation into a sustainable and low- carbon economy (Jayaweera *et al,* 2012). According to knoema website in 2018, CO_2 emissions for Sri Lanka was 23.8 million tones. CO_2 emissions of Sri Lanka increased from 9.9 million tons in 1999 to 23.8 million tons in 2018 growing at an average annual rate of 5.14%.

The amount of carbon emissions in Sri Lanka in 2018 was 23.8 million tons. So, considering the effect, this is an immense amount. Since, we are responsible citizens we need to pay attention to this specific problem. Although the emissions in 2018 are lower than in previous years, this is not a small amount. Hence, each of us will continue to take urgent care of our environment.

Even though the concept looks a little new both in Sri Lankan public banking sector and in the entire field of Human Resource Management, BOC has initiated many green HRM practices in recent past (Business Today, 2016). As pe the evidences they have go for digitization in many of the areas. So thy have stared adapting may of the green practices by adapting digitalities ad concerning on environmental sustainability (Annual report, 2015).

Similarly, the paper aims at providing strategies for enhancing environmental sustainability in Sri Lankan public sector banks and further try to identify the Green HRM practices which they are following. Likewise, the study hopes to create more awareness to HR managers and employees about the Green HRM. Green movement and utilization of natural resources also as to help organizations to properly maintain

and retain the natural environment for future generations.

1.2 Research Objectives

This study is mainly aimed to achieve the following objectives,

- To find out the relationship between Green Job Design & Environmental Sustainability.
- To find out the relationship between Green Recruitment & Selection and Environmental Sustainability.
- To find out the relationship between Green Training & Development and Environmental Sustainability.
- To find out the relationship between Green Performance & Reward Management and Environmental Sustainability.

1.3 Literature Review

Milliman and Clair (1996) were among the first to suggest an analysis of the great role of HRM developed a model of surrounding HRM activities involving four key steps in environmental management. First, a company requires an environmental vision as a guideline for shaping its strategy. Second, employees must be trained through their goals and strategy to understand the company's philosophy of environmental vision. Third, environmental performance of workers needs to be measured using a reasonable evaluation framework in accordance with these goals. Four, identifying workplace pro-environ-mental practices.

Renwick *at al.* (2013) also outlined three core components of the HR environmental management (EM) aspects. The first core component is related to green skills creation and includes activities such as selecting, recruiting, training and developing environmental knowledge and promoting EM leadership. The second core component is related to the motivation of green employees and implies appraisal and rewards. The third core component is about promoting employee engagement and involves valuing tacit awareness, inspiring workers and building a green organizational culture.

1.4 Significance of the Study

Nowadays, there is a growing need for strategic Green HRM; the integration of environmental management into HRM in the perspective of the question of environment pollution in the world. HR professionals can indicate that encouraging employees to be more environmentally friendly in the workplace is the top practice for their organizations.

Business entities have an immense responsibility for the environment as much as people. Since when performing business activities, they create CO_2 more than an average individual. Therefore, every organization are accountable to protect the environment. Then, in order to minimize CO_2 emissions or preserve the environment a company has to train or make its workers care about it. The Human Resource Management division is the best

place to do the job and they can convert their ordinary workers into green employees. Work on this subject is very important hence it helps to protect the environment.

Green HRM literature is predominantly western and given the importance of Asian economic growth for environmental management, this is a major gap to minimize in future studies (Renwich *et at*, 2013). Management scholars around the world are now analyzing various management practices that can facilitate achievements of Green HRM objectives and also have a significant impact on the organization's environmental competitiveness.

In the 21st century, HR professionals will incorporating green signals in conventional HR roles to ensure the climate is healthy and to achieve the organization's competitive edge.

1.4.1 Environmental Sustainability

The basic understanding of the term "environmental sustainability "expands our common perception of human activity so as to more clearly connect it with the ecological concept of interdependence, thus delineating the boundaries of this use of "sustainability" to correspond to the overlay of human activity upon the functioning of the supporting eco system. Then Environmental Sustainability is limited to and, in fact, becomes a subset of ecological sustainability. Broadly speaking, the idea of "environmental sustainability" may be seen as adding complexity to a portion of the word "sustainable development" used most widely.

i.e.," meeting the needs of the current generation without compromising the ability of future generations to meet their needs, by taking the general definition "meeting the resource and services needs of current and future generations without compromising the health of the ecosystems that provide them.

Specifically, environmental sustainability may be characterized as a state of balance, resilience and interconnectivity that enables human society to meet its needs while not exceeding the capacity of its ecosystems to continue to generate the resources required to meet those needs through our behavior to reduce biological diversity (John, 2011).

1.4.2. Green Human Resource Management

What is Green HRM?

Green Human Resource Management (GHRM) can be defined as the set of policies, practices and systems that stimulate a green behavior of a company's employee in order to create an environmentally sensitive, resource efficient and socially responsible workplace and overall organization (youmatter, 2018).

Green HRM is applied to all activities involved in designing, implementing and sustaining a programme that seeks to green an organization's employees. It is on HRM's side that regular workers are turned into green employees in order to achieve the organization's sustainability objectives and eventually make a meaningful contribution to the environment. It refers to policies, procedures and processes that make

the organization's workers green for the good of people, society, the environment and industry (Opatha, 2013).

Today the need for Green HRM is important for all over the world. The environmental awareness of each human being drives the living style and environment. The general employees are concerned in green human resource management because of its significance and need in the existing place of work. Our personal and professional lifestyle is affected due to many consequences. The corporate world is the most significant in enhancing the environmental issues and the corporate has to give clarification to this hazard. Nowadays organizations need green HRM for several reasons. Such as, To protect the environmental aspects, to instruct and encourage both financially or non-financially the employees to perform their activities in an environmentally trustworthy way, to increase or improve corporate environmental performance by certain HR functions such as training employee empowerment and Environmental Management System (EMS) rewards, to motivate employees to become involved in corporate environmental management activities, To provide environmentally friendly products and operations (Masood, 2018).

Green HRM is responsible for building green workforce that recognizes, respects and implements green initiative and retains its green goals in the recruitment, recruiting, training, compensation, growth and advancement of the company's

human capital. This refers to the policies, processes and structures that make green organization employees for the good of the individual, community, natural environment and business. Green HRM included two important elements: environmentally sustainable HRM processes and information preservation capital. Green HRM also includes reducing carbon footprint by less paper printing, video conferencing and interviews (Al Mamun, 2019).

Green organizational practice is important in the modern business area as the environment of the planet is shifting and becoming unsafe for human survival. We face various forms of natural disasters every year, such as hurricanes, floods, droughts, earthquake, extreme heat and ice melting, acid rains etc. Ecologists in the environment has proposed finding a sustainable equilibrium for the survival of the earth from every corner of the globe. Green HRM helps establish three foundations such as environmental sustainability, social sustainability and economic sustainability. Fortunately, certain government organizations and individuals, including environmentalists and nature lovers have come forward and paid serious attention to protect and preserve the environment. Green HRM activities is one of the crucial ways to make an organization greener and to ensure environmental protection. The practice of Green HRM benefits both the organization and community in the following ways.

Minimizes natural disasters, health diseases, and global warming due to

pollution, Ensure the survival of humans and business organizations and ecological balance, Increases employee productivity though satisfaction and better efficiency, Lesser consumption of power-energy, water and raw materials, Attracts best talented HR and ensure to retain them for longer period, Increase organizational image and larger scale of sales and services, Lowering costs due to electronic documentations, teleworking, video conferencing, recycling of different usable products within the organization (Hossen *et al*, 2018).

HRM is a manifesto that helps to build green workforce inside an enterprise that can recognize and respect the green culture. Throughout the HRM process of recruiting, hiring, and training, compensating, improving and enhancing the human resources of the company. Such a green initiative will retain its green objectives. A company's human resources department is capable of playing a significant role in creating environmental culture within the company. HR processes play an important role in turning Green HR policy into practice; Thus, human capital and its management are instrumental in achieving the goals of environment managers (Ahmad, 2015).

Green Job Design

Green work design is a comprehensive job analysis that involves roles, duties and obligations related to organizational and environmental sustainability in each positions as much as possible to protect the organizational as well as

environmental sustainability. In some business organizations each job description contains at least one role related to organizational and environmental sustainability. For certain business organizations, each work description includes at least one role related to organizational and environmental sustainability and also includes unique environmental obligations where applicable, job descriptions and person (job) specifications can include organization's economic, social, personal and technological requirements as far as possible (Das & Singh, 2016).

The benefits of embracing the idea of green jobs are evident: it helps to minimize the adverse effects on the environment, eventually contributing to environmentally healthy, socially appropriate and economically viable businesses and what is called a green economy for which the participation of businesses and employees is vital. The safeguarding of inefficient use of natural resources, waste management, pollution prevention and the safeguarding of sustainable food production are notable positive results that can be anticipated by emphasizing green employment (Jayaweera *et al*, 2012).

Green Recruitment and Selection

Green recruitment and Selection is the process of attracting and hiring candidates with knowledge, skills, attitudes and behaviors that conform to an organization's environmental management systems. A major challenge is the race of attracting creative talented and innovative employees, increasing recruitment

potential and hiring high-quality staff. Therefore, companies are required to learn and plan the greenways of recruiting and employing skilled workers in an attempt to ensure environmental protection at the workplace. Recruitment and selection processes will also understand the company's long-term criteria to align corporate environmental culture organizations with green recruitment and selection processes in this effort.

Basically, job description would take cognizance of health and safety duties and other associated roles affecting the environment. In fact, green targets for companies should be customized to gage the future viability of prospective applicants being recruited. Similarly, until the process of recruitment is completed, the chosen candidates have been granted a detailed green induction programme, which includes information on environmental protection and their contributions to green goals (Mashala, 2018).

To carry out the paper-free recruitment process by digital methods such as online application form, online interviews or telephone interviews are performed to minimize paper waste, fuel consumption and travel interviews. These activities reduce the rate of environmental degradation. Recruitment strategies may help to enhance environmental sustainability by ensuring that environmental culture and values are well aware of the environmental management policies of the company. In choosing job openings in certain business organizations, applicants who have experience of protecting

and maintaining natural resources are chosen to support ecosystems. Environment-related questions are asked by that business organization when interviewing candidates for selection. Here, are some of the successful green hiring practices that any company should follow in order to pick environmentally sustainable people in addition to the mail selection requirements for the particular roles and obligations of the business organization concerned (Das & Singh, 2016).

The most daunting problem faced by HR managers is to recruit and retain highly skilled and qualified workers in a global environment. Multi-National Companies are now positioning themselves as Green HRM followers to attract highly skilled and competent staff, who also have deep experience and understanding of green practices and sustainability issues. On the other hand, work candidates often train themselves in compliance with international green culture requirements and aim to acquire the skills needed as green workers. Workers also choose certain organizations that are concerned with environmentally and socially responsible.

The organization's environmental performance is influenced by green employee recruitment and the green recruitment process of recruiting. The organization's human resources must first be green of order to demonstrate good environmental efficiency (Dubey & Gupta, 2018).

Green Training and Development

Training and development systems built at all levels for workers will discuss the social and environmental aspects. The induction preparation for new joiners will include a green orientation programme that helps the employee to recognize the company's sustainability policies and activities and also comply with the company's green goals. Such a training programme will educate staff about the company's sustainability initiatives such as reducing greenhouse gas emissions etc (Mehta & Chugan, 2015).

Training programme will educate workers about the company's green initiatives, such as reducing greenhouse gas emissions etc. Providing the organizational leaders with environmental training to develop the necessary technical and management skills for maintaining, preserving natural resources and fostering sustainability in the environment. It is also essential to build environmental awareness among all employees by organizationally conducting seminars and workshops to achieve organizational sustainability. It is very difficult to achieve environmental related awareness, training and growth, materializing the business organization's planned environmental efficiency. Therefore, it appears that some business organizations have recognized the value of green education, training and growth in their organization for both organizational and environmental sustainability (Das & Singh, 2016).

Training and development is a process that focuses on skills, expertise and attitudes of workers, avoiding the degradation of information, skills and attitudes relevant to the environment. Green training and growth teach staff about the importance of environmental sustainability educating them in energy-conserving working practices, waste reduction, diffuse knowledge of the environment within the company and provide resources to involve workers in addressing environmental problems. Green training and development programmes make workers aware of the various aspects and importance of environmental management. It help them adopt different conservation methods, inside an organization like waste management. Furthermore, it enhances an employee's ability to deal with different environmental concerns (Ahmad, 2015).

Green Performance and Reward Management

Employee environmental performance in an enterprise is very difficult task. A programme of performance assessment to support the Green HR activities needed to establish environmental performance standards. Therefore, the activities and duties of job description in the company organization may be implemented in order to achieve the green goal objective.

Measuring green work efficiency for workers is one of the main roles of Green HRM. Appraisal of employee's green performance must be performed separately as part of the company's monetary-based and non-

monetary based compensation performance evaluation programme can be used for corporate sustainability accomplishments within the business organization. Monetary benefits for environmental sustainability achievements may be distributed in salaries, bonuses and cash incentives, while non-monetary rewards can include special leave, requirements for staff and family members. Organizational sustainability of organizations is highly dependent on the organization's green reward management practices. Providing opportunities to motivate workers when the company is active in recycling and waste reduction, promoting flexible scheduling and telecommuting and minimizing long distance business travel can also be viewed as green reward management activities in the enterprise (Das & Singh, 2016).

Green Compensation and reward is another potentially powerful tool for supporting environmental management activities. This may help to make effort for the attainment of environmental goals. Compensation and reward are the major elements of HRM process, this element is the most important for maintaining employee interest to that of the organization. The reward polices are focused on attracting, retaining and motivating the employee which lead to the achievement of organizational goal and improve the organizational commitment. Taylor *et al*., (1992) has done study in which he takes 16 companies from 5 different countries and examined that the companies offer green rewards to their

employees for their performance were more inclined to follow the green practices. Similarly study by Forman and Jorgensen (2001) identified that the employee commitment were increased toward the environment management program when they were offered compensation to take environmental responsibilities. Dow chemical is a very good example of reward and compensation; employees were motivated and given rewards when they came up with innovative waste reduction idea (Bangwal & Tiwari, 2015).

2. METHODS

This study has followed quantitative research approach and descriptive design . Survey method has used for collecting data and it was consisted with close ended questions and 5 point likert scale format. To conduct this research primary sources of data are used. A structured questionnaire has been developed based on the literature study and experts' opinions.

The Analysis has done through the SPSS package. The statistical techniques for data analysis was included descriptive statistics (mean, mode, median and standard deviation), bivariate method, correlation analysis and reliability. In addition to that, hypotheses of the study has been measured through Pearson's Correlation technique and the Researcher used SPSS for analyze, statistical concepts such as correlation, reliability and descriptive statistics.

This study has applied survey method to examine the relationship between

variables tested in the study. This study has four independent variables as Green Job Design (X1), Green Recruitment & Selection (X2), Green Training & Development (X3) and Green Performance & Reward Management (X4) while the dependent variable was Environmental Sustainability (Y).

After a population study it was identified that out of hundreds of employees there was 40 managerial level employees in fourteen branches of BOC who represent the positions of senior managers, managers, assistant managers, executive officers and junior executive officers. Therefore, the total population has been taken as the sample for this study. Accordingly, sample size was 40 for this study.

2.1 Research Model

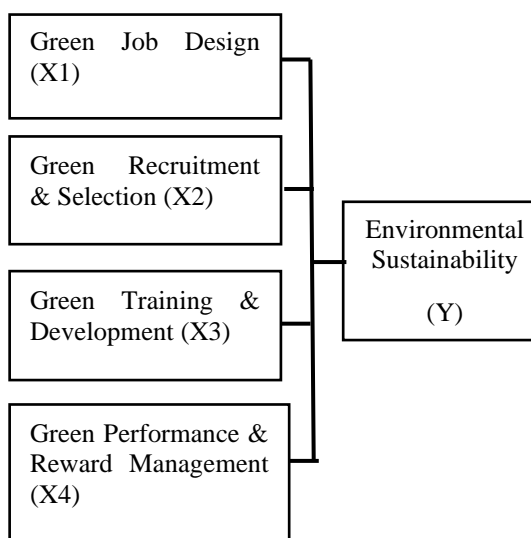The research model was based on the model created and tested by Oyewale (2019).

Figure 1: Conceptual framework

According to the Figure 1 Green Job Design, Green Recruitment & Selection, Green Training and Development and Green Performance & Reward Management are independent variables. As well as dependent variable is Environmental Sustainability. This study is going to check this combination in the organizational context.

To achieve the study objectives, the following main hypotheses was formulated:

H1: There is a significant positive relationship between Green Job Design and Environmental Sustainability.

H2: There is a significant positive relationship between Green Recruitment & Selection and Environmental Sustainability.

H3: There is a significant positive relationship between Green Training & Development and Environmental Sustainability.

H4: There is a significant positive relationship between Green Performance & Reward Management and Environmental Sustainability.

3. RESULTS

All variables were measured with questions adapted from existing scales. All items were measured on a five-point Likert-type scale where 1 = strongly disagree and 5 = strongly agree.

Questionnaires were analyzed responses given by responders to every question which represent both dependent and independent variables. Already tested questioner (Oyewale,

(2019) was used to for this study. Questionnaire consists of set of well-formulated questions to problem and obtained responses from respondents. (Descriptive statistics, reliability and correlation test were used to test the relationship and hypotheses.

3.1 Descriptive statistics

According to Sekaran (2006) descriptive statistics such as maximum, minimum, means, standard deviations, and variance were obtained for the interval-scaled independent and dependent variables. Dependent Variable of this study is Environmental Sustainability.

Table 1: Descriptive statistics

	n	**minimum**	**maximum**	**mean**	**std. deviation**
Environmental Sustainability	36	17	20	18.64	.723
Green Job Design	36	17	20	19.17	.941
Green Recruitment & Selection	36	16	20	17.28	1.06
Green Training & Development	36	14	18	15.53	1.29
Green Reward & Performance Management	36	8	13	10.55	1.46
valid n (list wise)	36				

Source: Analysed data, 2020

Table 1 is indicated that the mean & standard deviation of the variables. Green Job Design, Green

Recruitment & Selection, Green Training & Development and Green Performance & Reward management has 19. 17, 17.28, 15.53 & 10.55 mean value and 0.72, 0.94, 1.06, 1.29 & 1.46 standard deviation respectively.

3.2 Reliability of the Measures

Table 2: Reliability Statistics

Reliability statistics		
	Cronbach's alpha	No of items
Green Job Design	.841	4
Green Recruitment & Selection	.800	4
Green Training & Development	.781	4
Green Performance & Reward Management	.735	4

Source: Analysed data, 2020

According to the table 2 Cronbach's Alpha value for Green Job Design is 0.841. For an instrument to be considered a reliable data collection tool this value should be greater than 0.7. This value is greater than above the required 0.7 which indicates that the instrument and data collected for the purpose of this research has a high reliability. So, in this context, the questions used to measure the Green Job Design is highly reliable one. Likewise Green Recruitment & Selection, Green Training & Development and Green Performance & Reward management also have a greater Cronbach's Alpha value than 0.7. Therefore, it can be concluded

that the questions used to measure the Green Recruitment & Selection, Green Training & Development and Green Performance & Reward Management are also highly reliable.

3.3 Correlation Analysis

Table 3: Correlation between dependent and independent variables

Correlations		Environmental Sustainability	Green Job Design	Green Recruitment & Selection	Green Training & Development	Green Reward & Performance Management
Environmental Sustainability	Pearson Correlation	1	.553**	.471**	.331*	-.021
	Sig. (2-tailed)		.000	.004	.049	.903
	N	36	36	36	36	36
*. Correlation is significant at the 0.05 level (2-tailed).						

Source: Analysed data, 2020

Correlation analysis is a statistical technique which can use to show the relationship between variables. Most common methods that can use for measure the correlation are Perarson & Product-moment correlation.This study has mainly used Pesrson correlation for analyze the data and hypotheses.

The Pearson correlation value for Green Job Design and Environmnental Sustainability is 0.553 and it has a moderate positive relationship. Hence the significance value is less than 0.05 H1 is accepted.

Green Recruitment and selection has a moderate positive relationship with Envirnomental Sustainability and H2 can be accepted because of the significance value is less than the alpha value.
The Peasorn correlation value for Green Training & Development is 0.331. It is a low positive relationship.the alpha value is less than the significance value.So, H3 is accepted.

According to the correlation table 3 the correlation cofficent is -0.21 between Green Performance & Reward management. It has indicated that there is a negative relationship between the independent and the dependent variable.Therefore, it can be statistically indicated that there isn't a significant as well as positive correlation between these two variables.Then,the researcher can't accept H4.

4. DISCUSSION

This section represent the basic findings of GHRM and Environmental Sustainability. The basic findings demonstrate the basic assumptions proposed along with the interpretation of GHRM and theoretical frame work. Considering the analytical approach, finding based on the current literature was found. The literature indicates that sceintists have invented and branded the idea of GHRM as a panacea for environmnetal management in contemporary organizations after the development of Human Resource

Management to focus on Environmnetal Sustainability (Jackson & Seo, 2010; Renwick *et* al, 2013).

There is a agreement among scholars in this entire content that GHRM compatibility with conventional HRM practices enhances organizational enviromental management (Jackson *et al,* 2014) and essentially in the apoption of broad organizational practices (Schuler & Jackson, 2014). As such, the contribution of GHRM dimensions to enhancing the application of green management principles by employees within the company is given importance (Cherian & Jacob, 2012; Opatha & Arulrajah, 2014).

When considering the literture, some schorlars have identified positive relationship between Green HRM functions and Environmental Sutsiannbility.Green HRM fuctions such as Green Job Design, Green Recruitment & Selection, Green Training & Development and Green Performnace & Reward Management have a positive influence on Environmnetal Sustainability (Jabbour, 2011). In terms of green recruitment & selection, the results indicate that recruitment strategies can promote environmental management practices in organizations by ensuring that new hires recognize the environmental culture of organizations and share their environmental values(Jackson *et al,* 2011).

Similarly, organizations that opt to use preserve their image as green employer (Jackson *et al,* 2011),They recruit new talents,high quality workers with an environmental beliefs (Ahmad, 2015). Green Training & Development is another GHRM function which has the direct impact on Environmnetal Sustainability. It is the most important HRM factors for the achievement of the environmental performance (Haddock-Miller *et at*, 2015). Renwick *et al,* (2013) suggests that well-trained and environmentally conscious front-line employees conserve the environmnet as they are ideally positioned to identify and reduce waste by their places.

Green rewards and compensations, on the other hand, places the company and an excellent environmental performance. Organizations that reward the constructive green actions of their workers to increase their efficiency and royalty and thereby encourage them to change their environment positively.

But this study has explored that there is a positive relationship with the independent variables;Green Job Design, Green Recruitment & Selection, Green Training & Development and a negative relationship with Green Performance & Reward Management on Environmental Sustainability. Although Bank of Ceylon gives their concern in job design, rectuitment & selection and training & development they don't reward their employees to motivate the employees more.

Organizations will enable workers to think about solutions that can help to reduce carbon emissions through

participation and involvement in green organizational projects and by aligning their motivation, priorities and skills with green management practices, contribute to better green management in the company (Mashala, 2018).

5. CONCLUSION

The study assessed the relationship between Green Human Resource functions such as Green Job Design, Green Recruitment and selection, Green Training and Development and Green Performance and Reward Management & Environmental Sustainability. The organizational problem is to ascertain the ideal Green HRM system which could be utilized to increase Environmental Sustainability and at the same time to achieve Organizational Objectives.

The first objectives of this study was to identify the relationship between Green Job Design and Environmental Sustainability in BOC branches in Matale district. According to the analyzed data it was showed that there is a positive relationship between these two variables which means when we increase Green Job Design activities it helps to increase the Environmental Sustainability. It is clear that Bank of Ceylon has a Green Job Design initiatives or criteria when forming a job according to the analyzed data. Bank of Ceylon uses a comprehensive job analysis that involves roles, duties and obligations related to organizational and environmental sustainability in each positions as much as possible to protect the organizational as well as environmental sustainability.

The second objective of this study was to identify the relationship between Green Recruitment and Selection and Environmental Sustainability. According to the study there is a positive relationship between these two variables. Therefore, Bank of Ceylon uses the process of attracting and hiring candidates with knowledge, skills, attitudes and behaviours that conform to an organization's environmental management systems.

The third objective of this study was to identify the relationship between Green Training and Development and Environmental Sustainability. When considering the analyzed data it is clear that there is a positive relationship between this dependent and independent variable. Which has proved that Bank of Ceylon was used any kind of training and development practices according to the green aspects.

The last objective of this research was to identify the relationship between Green Performance and Reward Management & Environmental Sustainability. But there is a negative relationship between these two variables according to the data outputs. So it is obviously proved that Bank of Ceylon is not reward much other employees to achieve Environmental Sustainability.

Accordingly this study was done to assess the practical situation of Green HR in a Bank of Ceylon in Sri Lanka. This study supports the systematic literature of Green HRM and environment protection that is little in developing countries like Sri Lanka.

Also it provides a clear understanding on how Green HRM practices associate with each other. In the near future, GHRM as an initiative has the potential to be worked upon as one of the best practices for sustainable growth of businesses.

Some of the limitations of the study can also be identified which will be helpful in further researchers. This research has been limited to fourteen Bank of Ceylon branches in one district. The sample has taken from only in Matale district and it was difficult to collect data from other branch. And also only 36 employees were responded out of 40 managerial employees. At the same time, though this quantitative analysis, the findings may not be enough to generalize to the entire Bank of Ceylon branches. It will be more reliable to select a sample which contains more elements in different public banks. So, this was a limitation of the study. Another limitation of the study is the data collected method. The data has been collected only through the questionnaires. It might not be sufficient and also respondents may not have enough time to put answers and read questionnaires because staffs of the bank was very busy in whole day. It also can be identified as a limitation of the study. Another limitation of this study was there were only four independent variables were assessed in here because the limitation of the time and to limit the scope of the subject. The other limitation was lack of literature in the Sri Lankan context regarding this matter. The researcher found it difficult to gather data with regard in the Sri Lankan business context.

There were some researches on Green banking in Sri Lanka conducted by many scholars. But even still it is an evolving subject or new subject in Sri Lanka. Hence, it was so difficult to find related research on this subject in banking industry in Sri Lanka.

This study further recommends a proper reward system for green employees, appreciates green employees when they do a green activity, providing regular feedbacks to achieve environmental goals or improve their environmental performance, conducting online training programmes, Appreciating green activities by giving additional points in interviews, creating environmental clubs to organize environmental programmes and giving opportunity to all staff members to participate awareness programmes about environmental degradation to increase the awareness and practice on Green HRM in the public banking sector.

Green HRM has a significant contribution to sustainability in the environment. The definition places priority on both companies and workers in working together to protect the environment and enhance the efficiency of companies. However, Although its activities in Sri Lanka's public banks are fresh, Green HR initiatives will concentrate on reducing and eliminating environmnetal waste, rehabilitating HR goods, tooling procedures to achieve greater productivity and lower costs.

The bottom line is creating a green culture where all workers engage in organizational green management and sustinability efforts. In addition, green issues have consequnces for the operations of the HR department.Thus, green issues and policies should be incorporated into the normal, day-to-day HRM activities and decisions. This hopes to stimulate understanding of the concept of Green HRM and it's practices solving environmnetal issues in Bank of Ceylon.

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Readiness to Adopt Big Data Analytics in Private Sector Companies, Sri Lanka

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Abstract

The amount of data generated through various sources will continue to grow as people interact more with online. Businesses can gain actionable insights to improve their outcomes by analyzing these massive set of data. Private organizations, being more technology oriented, have concern on the opportunities provided by Big Data Analytics (BDA). But still they are postponing decisions on BDA as they are not competent whether they ready for take the advantage of such technology. The purpose of this study was to investigate the readiness to adopt BDA in private sector companies, Sri Lanka. The study collected data using a questionnaire that was developed based on the technology-organization-environment (TOE) framework. A sample was selected from listed private companies in Colombo Stock Exchange under twenty sectors. Collected data was analyzed using the statistical Package for Social Scientists (SPSS). The empirical findings of the analysis found that Sri Lankan private companies are having low tendency towards readiness for BDA and Information Technology (IT) infrastructure, security, firm size, management support and competitive advantage are found to be major constituents in assessing readiness to adopt BDA. The results of this study beneficial for the corporate managers and policy makers when preparing their business entities to adopt BDA. Further the findings of present study guide to the future researchers in the arena of BDA.

Keywords-: Big Data Analytics, Organizational Readiness, Private Sector, Sri Lanka

1. INTRODUCTION

The rapid changes in the business environment are making many organizations to strive for competitiveness so as to keep abreast

with the global standards. Organizations expand their network by opening up branches both locally and internationally through increasing their operations by leveraging information technology (IT). These global trends can be seen in many large organizations across industries joining the data economy. By doing so, many of these organizations try to find how best they can improve their traditional data analytics in order to remain competitive in the business arena. It implies that these organizations need to prepare for change of skills, leadership, organizational structures, technologies architectures and other organizational settings in order to welcome new technology. This in turn will help organizations to cope with technological innovations and to gain competitive advantages acquiring wide global market share.

According to Ferguson (2012), for many years organizations have been building data warehouses to create insights for decision makers to act on improving business performance and to study their business activities. He noted that these traditional analytical systems capture, clean, transform and integrate data from several operational systems before loading it into a data warehouse. However, he argues that even though these traditional environments continue to advance, many new more complex types of data have now emerged that businesses ought to use in order to analyze and build on what they already know. In addition, Wielki

(2013) observed that new data is being created and generated at high speed. The Big Data (BD) concept may be looked at as the formation of datasets that continuously expand so much that it becomes challenging to manage using existing database management concepts and tools (Singh & Singh, 2012). Researchers Kaisler et al. (2013) describes the concept of BD as the amount of data just beyond technology's ability to process, manage and store efficiently. Notwithstanding the data volumes, BD can help an organization to gain insights and make better decisions (Goss &Veeramuthu, 2013).

BD Technology, being an emerging technology, is currently utilized in many echelons of business organizations and their management. Some organizations also use the special term —BD Analytics Technology, but the central idea behind them is the same (Mahesh et al,2018).Although BD can produce exceptionally useful information, it also presents new challenges with respect to storage, cost and security and how long it must be sustained (Michael & Miller, 2013). BD also supplies more raw materials for statistical mischiefs and influenced fact finding excursions (Lohr, 2012). When an organization can leverage all the data available rather than just a subset of its data then it has a great advantage over the competitors (Singh & Singh, 2012). Organizations ought to start thinking deeply about whether they are prepared to exploit BD's potential benefits and also to

manage the threats it can pose. Once it is acknowledged that data is to be treated as a corporate resource, serving several 3 purposes, management of which must satisfy the three criteria that is too big, too fast and too hard the organizational implications may be startling (Motau & Kalema, 2016).

According BD - Global Market Outlook (2017-2026) report, the Global BD market accounted for $31.93 billion in 2017 and is expected to reach $156.72 billion by 2026 growing at a rate of 19.3% during the forecast period. Increase in number of mobile devices & apps, the growth of the healthcare industry and BD solutions enhancing organizational return on investment are some of the factors influencing the market growth. However, factors such as lack of awareness of benefits of BD solutions & services as well as privacy & security concerns in BD are hindering the market.

Amongst type, unstructured data segment held considerable market growth during the forecast period as there is rising amount of unstructured data. Organizations are adopting more BD solutions to explore and handle unstructured data. By geography, North America is anticipated to dominate the global market during the forecast period owing to high adoption of analytics across countries of North America. In addition, Asia pacific registered for highest growth rate due to growing amount of data generation as well as

high penetration of internet across the region(BD - Global Market Outlook (2017-2026) report).This is also supported by the BD Analytics Market Study (2017), by region, Asia Pacific is most likely to prioritize all BD use cases, with the exception of clickstream analytics.

According to International Data Corporation (2019) the industries currently making the largest investments in BD and business analytics solutions are banking, discrete manufacturing, professional services, process manufacturing, and federal/central government. Combined, these five industries will account for nearly half ($91.4 billion) of worldwide BDA revenues this year. The industries that will deliver the fastest BDA growth are securities and investment services (15.3%) and retail (15.2%). Retail's strong growth will enable it to move ahead of federal/central government as the fifth largest industry in 2022. Mahesh et al (2018), explained that currently, the Sri Lankan market is already playing host to several important experiments into the field of BD, however the reason for their importance is more to do with the fact that these are historic first steps, rather than the fact that they are revolutionary steps forward.

In 2015, a study by the Business Application Research Center(BARC) analyzed how some of the biggest companies in the world are utilizing BD analytics. According to their study, over 40% of companies

worldwide use BD analytics. Further, companies who quantify their gains from data analytics reported an 8% increase in revenues and a 10% reduction in costs. Further in 61% of companies, where BD initiatives are a part of integrated business processes, senior management is the primary driver. In contrast, 34% of organizations considering using BD analytics have senior management as the primary driver.

Some leading large scale companies in developed countries in the world are actively and increasingly adopting BD Technology (BDT) to combat severe market competition, but many companies in developing countries such as Sri Lanka and India are still in the early stage of the adoption or sometimes they don't have even an intention of adopting BDT (Mahesh et al, 2018). As a result, almost all the empirical research studies have so far focused on BDT adoption in such developed economies (Verma and S. S. Bhattacharyya, 2017).

According to the findings of BD and AI Executive Survey(2018), nearly 3/4 of the executives surveyed (73.2%) claim that their firms have achieved measurable results from their BD and AI investments. This represents a significant increase over results from the 2017 executive survey, when a considerably lower 48.4% of executives reported achieving measurable results. A further breakdown indicates that 23.9% of executives characterize their results as highly transformative

and innovative. Overall, 40.8% of executives responding in 2018 believe that their BD and AI investments

But when consider the situation in Sri Lanka, still behind on making data driven decisions even though companies are generating massive amount of data through their daily business activities. Even some companies interested in accepting new technologies but having concerns on preparing for new technologies. As a new technology, most of Sri Lankan companies adopted Enterprise Resource Planning (ERP) system to streamline their operations, but there is no or rare evidences whether these companies ready to get use of data generated through these systems.

Sri Lanka is behind the BD and analytics curve, we will catch on fast. The big industries like retail, banking and finance will lead the way. Once the flood gates are open we may see some of the BD applications being adopted in Sri Lanka faster than in other countries (Daniel, 2015). According to the BD Executive Survey (2018) the firm that best understands its data assets, and how they can best be deployed to business advantage, is likely to be well positioned in the marketplace.

As the companies have to compete in a data driven economy, it is very much important to get ready for BD analytics. Because today the data has become one of the most powerful weapons that sometimes decides the

survival of the business organizations. The entities which can get best out of data will perform beating the rivals. BD analytics tools and techniques are rising in demand due to the use of BD in businesses. Organizations can find new opportunities and gain new insights to run their business efficiently. These tools help in providing meaningful information for making better business decisions. The companies can improve their strategies by keeping in mind the customer focus. BD analytics efficiently helps operations to become more effective. This helps in improving the profits of the company. BD analytics tools like Hadoop helps in reducing the cost of storage. This further increases the efficiency of the business. With latest analytics tools, analysis of data becomes easier and quicker. This, in turn, leads to faster decision making saving time and energy. By considering these avenues, it is very much important the organization's readiness for BDA. Organizational readiness for a system, technology or investment can be defined as those capabilities an organization needs to possess to be ready for a successful initiative (Williams & Williams,2014). Since the mid of last decade, BD researchers and computer scientists mainly focused their research studies on technical and engineering aspects of BD (Kim et al, 2015).

There were very few research studies performed on technology management areas of BD. Hence,

now it is high time to extend the research on BD in terms of its readiness by practitioners on the industry. There can be witnessed a dearth of in-depth research studies on the factors that impact the Readiness to adopt BDA by organizations. It clearly emphasized that there is a clear knowledge gap in the arena BD readiness. Hence, it is vital to conduct a holistic study to understand the level of readiness for BDA from the practitioners 'standpoint. Above practical and knowledge gaps confirm the necessity of further investigation on BD readiness. Motivated by these gaps, the present study aims to understand the readiness to adopt BDA in private sector organizations, Sri Lanka.

The goal of this study is to investigate the readiness to adopt BDA by private sector organizations, Sri Lanka. The specific objectives are:

1. To identify the level of readiness to adopt BD analytics

2. To examine the relationship between technological, organizational and environmental factors with readiness to adopt BD analytics

3. To identify the impact of technological, organizational and environmental factors on readiness to adopt BD analytics

Singh and Singh (2012) that looks at BD as the datasets which continue to grow so much that it becomes difficult to manage using existing database management concepts and

tools. From this perspective, BD refers to that data that is too big, too fast, or too hard for existing tools to process. Here, —too big means that organizations must increasingly deal with petabyte-scale collections of data that come from click streams, transaction histories, sensors, and elsewhere. —Too fast means that not only is data big, but it must be processed quickly. —Too hard is allencompassing for data that an existing processing tool is unable to manage and so it needs some improved analysis (Madden, 2012).

In addition to the issues of data size, Laney (2012) presented a well-known definition (also called 3Vs) to explain what is the —big‖ data: volume, velocity, and variety. The definition of 3Vs implies that the data size is large, the data will be created rapidly, and the data will be existed in multiple types and captured from different sources, respectively. Later studies pointed out that the definition of 3Vs is insufficient to explain the BD we face now. Thus, veracity, validity, value, variability, venue, vocabulary, and vagueness were added to make some complement explanation of BD.

BD provides significant opportunities for enterprises to impact a wide range of business processes in organizations (Izhar et al., 2016). Organizations can create huge volume of data in their daily business activities. The problem though is that, this data was created and captured in many different formats, which make it almost impossible to understand the existing relationships between different data. As a result, this huge volume of data may get redundant and hard to identify which data is relevant to the organization's goals. BD may be created in petabytes or exabytes scale and much of which cannot be integrated easily. For example, the government agencies, the large, medium and small private enterprises in many domains such as engineering, education, manufacturing, are drowning in an ever-increasing deluge of data. Companies like Google, eBay, LinkedIn, and Facebook were built around BD from the beginning (Davenport & Dyche, 2013).

The use of BD technologies should be done by architectural groups and analytics groups with an operations research title, that exist within IT organizations. In most cases these central service organizations are aligned to BD initiatives with analytically-oriented functions or business units marketing. Furthermore, the organizations that have close relationships between the business groups addressing BD and the IT organizations supporting them, had initiatives that seemed most effective and likely possible to succeed (Davenport & Dyché, 2013). It is important to note that BD is not a single technology, but a combination of new and old technologies that support companies gain insight while effectively handling data load and storage problems. BD analytics require the ability to collect, manage,

and analyze potentially massive volumes of different data, at the right speed, within the right time frame, while providing the right-time analysis and activity to the end consumer (Halper & Krishnan, 2013).

Theories of BD and Technology Readiness

The rapid initiation and convergence of ICT have triggered a vast array of cultural, social and economic changes. Global ICT, which are growing in capacity and improving in terms of interactive and dynamic operations have become major drivers of competitiveness in the organizations. This is achieved by taking into consideration the benefits in the adoption and effective use of technologies (Yunis, 2011). Toufani and Montazer (2010) also argues that the high level of technology readiness allows organizations to manage business electronically in order to achieve less turn-around time, faster delivery of services, enhanced product selection, international competitiveness, a broader market reach, reduced costs, faster and limitless access to new customers and suppliers, increased depth of communication, exchange of information. Information Technology has long been applied to support the exchange of goods, services and information among organizations (Naseebullah et al., 2011). To meet the intensifying market needs, one of the primary duties of technology forecasting within organization is to; identify relevant technologies, determine technology readiness, predict future development and to estimate suitability of technology within the organization (Ardilio et al., 2012). The importance of information and communications technologies as powerful tools for socio-economic development is now widely acknowledged not only among large organizations but also among the small organizations (Mutula & Brakel, 2007). The need to identify and explain the factors that address technology readiness and its assessment has been the basis for several researches. In this viewpoint several theories have been at the lead of many studies. These theories are the Technology Readiness Index (Parasuraman, 2000), Technology Acceptance Model (Davis et al., 1989)and Technological Organizational and Environment framework (Tornatzky& Fleischer, 1990).

Factors Influencing Readiness to Adopt BD Analytics

Several researchers have discussed and argued that numerous factors influence BD readiness within an organization. These factors may differ from one organization to another and they include but not limited to;

a) Reliability
Traditionally organizations use data management and analysis systems, mainly based on relational database management system (RDBMS) to store and analyze data, produce reports and make decisions (Al-

Najran & Dahanayake, 2015). However, these traditional RDBMS could be overwhelmed with BD due to many reasons. Kelly (2013) indicates that due to the various dissimilar data sources and the aggregated volume, it could be difficult to collect and integrate data with reliability from distributed locations. Another reason is the failure to aggregate massive and heterogeneous datasets, while at the same time provide function and performance guarantee for retrieval, scalability, and privacy protection. Lastly, the mining of the massive datasets in real time to do visualization and prediction could be a challenge. Hence, to deal with the voluminous data, innovative solutions for data models, algorithms and architectures have to be designed providing the necessary reliability and flexibility for novel BD analytics applications (Al-Najran & Dahanayake, 2015). Accordingly following hypothesis is derived.

H1: There is a significant relationship between reliability and readiness for BDA

b) IT infrastructure
As the data grows in the industry, new techniques and approaches need to be adopted (Bakshi, 2012). BD difficulties affect information technology infrastructures. The capability to collect and process BD necessitates sufficient transmission and storage capacities, as well as computing power. Technological resource competency mainly consists

of IT infrastructure and IT related skills. Organizations that are equipped with technological resource competency tend to adopt BDT faster than others (Chatterjee et al, 2002). Hence, the following hypothesis can be obtained.

H2: There is a significant relationship between IT infrastructure and readiness for BDA

c) Security
BD forces decision makers to adopt cloud computing but security are on their minds for every cloud project. Researchers (Chen et al., 2012) state that organizations of different sizes are facing the daunting task of defending against cybersecurity threats and protecting their intellectual assets and infrastructure. Processing and analyzing security-related data, however, is increasingly difficult. The privacy of data is another big concern, and one that rises in the context of BD (Jagadish et al., 2014). As cited in BD Executive survey(2018), executives were asked to cite what they see as the greatest data threat to their organization. Majority (35.2%) of executives viewed cyber security breaches as the single greatest threat to their firms. This translate in to following hypothesis.

H3: There is a significant relationship between security and readiness for BDA

d) Management Support
Management support is usually stated as a critical success factor in the field

of data business intelligence, warehousing and BD analysis (Chen et al., 2012). Rajpurohit (2013) also argues that in order to resolve the BD problem, managers need to realize that BD ownership can no more be left simply to statisticians or business intelligence units. Deriving the maximum value fromanalytics would need configuring and customizing the analytics implementation to meet the business goals. Accordingly following hypothesis is suggested.

H4: There is a significant relationship between management support and readiness for BDA

e) Firm size

Organization that have long handled massive volumes of data are beginning to enthuse about the ability to handle a new type of data while organizational size is often positively correlated with the availability of resources (Ebner et al., 2014). Organizational size is another important factor and it includes the firm's annual revenue and number of employees that could support the adoption of technology. Several past studies have also found that firm size is an important factor affecting IT adoption (Dholakia, N. Kshetri,2004).It is generally believed that larger organizations are more resourceful and as result, organizational size positively affects BDT adoption intention (Agrawal,2015). Taking these factors into consideration, following hypothesis is suggested.

H5: There is a significant relationship between firm size and readiness for BDA

f) Financial Resources

Most organization prefer to archive a large amount of data that is not even being used since there is no cost effective way to process it and get value out of it. BD analytics can reveal insights previously hiddenby data that were too costly to process, such as sensor logs (Goss &Veeramuthu, 2013). There is also the issue of resource constraints in some organization when deciding on appropriate strategies to tackle BD. Resource availability in terms of money and human resources is a major factor when assessing BD readiness in an organization. Businesses operating in the BD space continue to face obstacles in accessing finance and skilled labour. Thus, following hypothesis is suggested.

H6: There is a significant relationship between financial resources and readiness for BDA

g) Regulatory support

Regulatory support encompasses the various types of incentives and assistances provided by the governments and related regulatory authorities. The studies investigated the influence of this aspect on similar technology related adoptions have affirmed that it has a positive impact on adoption decision (Zhu et al, 2006). Therefore, it can be considered that regulatory support influences readiness for BDA in a positive

manner. Regulatory support is a critical factor influencing innovation diffusion (Zhu & Kraemer 2004; Zhu et al., 2006). Another study investigates the adoption of e-business and finds that governments can encourage e-business legislation by supportive regulations and policies (Zhu et al., 2006). These issues are particularly important in Asian countries. Another study investigates, for example, the adoption process of Internet technologies in China and finds that Chinese companies have the highest concern for the regulatory environment in which they and their business reside (Chau et al., 2008). Regulatory support from the government can form an encouraging environment that will make decision makers aware of this technology and consider adopting it in their enterprises (Agrawal, 2015).Therefore following hypothesis is proposed.

H7: There is a significant relationship between regulatory support and readiness for BDA

h) Competitive advantage

As organizations work to extract competitive business values and ultimately revenue from a growing sea of data, BD implementations leverage diverse sets of distributed semi-unstructured and unstructured data types, which frequently start with mathematics, statistics and data aggregation efforts (Villars &Olofson, 2011). Villars & Olofson, (2011) also noted that competitive advantage can be greatly improved by leveraging the right data. When an enterprise can leverage all the information available with large data rather than just a subset of its data then it has a powerful advantage over the market competitors. BD can help to gain insights and make better decisions (Singh & Singh, 2012). Considering these factors following hypothesis is developed.

H8: There is a significant relationship between competitive advantage and readiness for BDA

i) Environmental Uncertainty

Environmental uncertainty behaves in two ways in developed and developing nations (Agrawal, 2015). In developing countries, it particularly shows a negative impact on BDT adoption(Mahesh, 2018).As indicated in an earlier research, firms facing environmental uncertainty have greater incentives to adopt IOS (inter-organizational innovation) to improve information exchange and to reduce uncertainty between trading partners. Firms facing higher environmental uncertainty will sense more opportunities, are proactive and innovate more than other firms (Sharma, 2000). Furthermore, environmental and/or market uncertainty forces organizations to adopt and implement new technological innovations to stay competitive (Bolloju & Turban, 2007). However, this situation might be different in developing countries. Environmental uncertainty may have a negative influence on such firm's proactive and innovative strategies

and behaviors. The reason is that firms in these emerging economies are more risk averse than say, firms in western developed countries. Consequently, without external support from their business partners in the industry they are less likely to take initiative to adopt BDA and associated technologies (Agrawal,2015). Accordingly following hypothesis is derived.

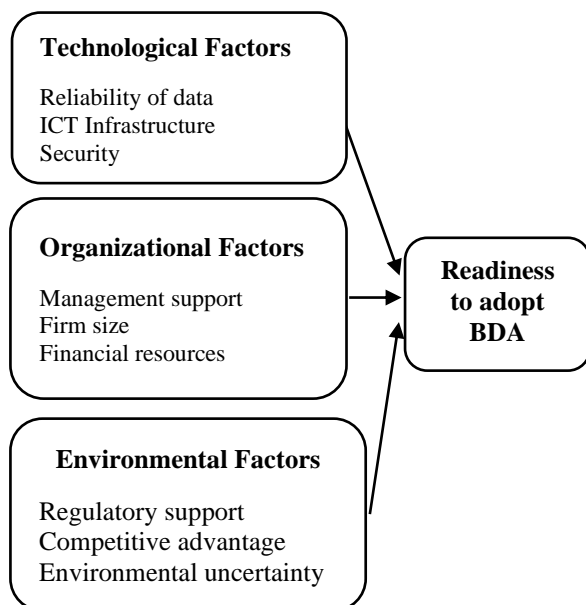H9: There is a significant relationship between environmental uncertainty and readiness for BD analytics.

Figure 1: Research Framework

2. METHODS

Quantitative approach is adopted for this study as it was considered to be the best approach in order to effectively address the objectives of the study. The targeted population for this study was comprised IT Managers in private sector companies listed in Colombo Stock Exchange. Thereby a private company is considered as a unit of analysis. There were 290 companies registered under 20 sectors. Out of the listed private companies of 290, a sample of 114 companies were selected according to G*Power sample size calculator. The sample was selected using stratified random sampling method by taking the participants proportionately from each sector.The primary data collection included administering surveys with closed-ended questions in the form of questionnaire. The questionnaire items were developed based on the instruments which were validated in previous studies;Kalema, B. M., &Mokgadi, M. (2017). Agrawal, K. (2015). Salleh, K. A., & Janczewski, L. J. (2016, May) and Jorge Garcia, (2016). The responses were recorded using 5 point lickert scale (Strongly Agree to Strongly Disagree). Descriptive statistics and multiple regression analysis performed to analyze the data with the aid of SPSS Package.

3. RESULTS

A structured questionnaire was distributed among a sample of 141 IT managers who represents 20 sectors in Sri Lanka. The questionnaires were sent both manual and online bases to achieve high response rate. The researcher was able to collect 111 questionnaires achieving 78% response rate. According to the demograhic analysis of the sample, majority of the sample (77%) were

included IS/IT Management/staff and they represented 14 sectors. Accordingly, 78% companies employ more than 2000 employees where 95% of majority handle more than 100 TB of data per month.

Validity Test

Exploratory Factor Analysis

Prior to the extraction of the factors, several tests should be used to assess the suitability of the respondent data for factor analysis. These tests include Kaiser Meyer-Olkin (KMO) Measure of Sampling Adequacy (Kaiser,1970,1974) and Bartlett's Test of Sphericity. The KMO index, in particular, is recommended when the cases to variable ratio are less than 1:5. The KMO index ranges from 0 to 1, with 0.50 considered suitable for factor analysis (Hair,1995;Tabachnick and Fidell, 2007). The Bartlett's Test of Sphericity should be significant (p (p<.05) for factor analysis to be suitable (Hair,1995; Tabachnick and Fidell, 2007). According the researcher carried out the KMO test and Bartlett's Test of Sphericity and the results presented on the below Table 1.

Table 1: Results of KMO test and Bartlett's Test of Sphericity

Variable	Items	Value of KMO Test	Value of Bartlett's Test of Sphericity
Reliability	03	.778	.000
ICT Infrastructure	03	.638	.000
Security	03	.574	.000
Management support	03	.638	.000
Firm size	03	.884	.000
Financial resources	02	.600	.000
Regulatory support	03	.532	.000
Competitive advantage	03	.585	.000
Environmental uncertainty	03	.500	.000
Readiness to adopt BDA	06	.582	.000

Source: Survey Data, 2019

Based on the results presented on Table 1, the values of KMO for all variables are greater than 0.5 which satisfy adequacy level of the sample for the study. Further the values of Bartlett's Test of Sphericity are less than 0.05 and significant for factor analysis. Thereby the data set confirms the validity of the study.

Reliability Test

The most commonly used internal consistency measure is the Cronbach Alpha coefficient. It is viewed as the most appropriate measure of reliability when making use of Likert scales (Whitley, 2002, Robinson, 2009). No absolute rules exist for internal consistencies, however most agree on a minimum internal consistency coefficient of .70 (Whitley, 2002, Robinson, 2009). Accordingly the researcher performed

reliability test and the results presented in following table.

Table 2: Results of Reliability Test

Dimension	Pilot survey		Real survey	
	No of items	Cronbach Alpha Value	No of items	Cronbach Alpha Value
Reliability	3	0.902	3	0.902
ICT Infrastructure	3	0.810	3	0.810
Security	3	0.856	3	0.856
Management Support	3	0.910	3	0.910
Firm Size	3	0.856	3	0.856
Finance Resources	2	0.733	2	0.733
Regulatory Support	3	0.878	3	0.878
Competitive Advantage	3	0.830	3	0.830
Environmental Uncertainty	3	0.964	3	0.964
Readiness for big data analytics	6	0.716	6	0.716

Source: Survey Data, 2019

Table 2 illustrates the Cronbach Alpha value for each dimension recorded at the pilot survey and real survey. For an exploratory or pilot study, it is suggested that reliability should be equal to or above 0.60 (Straub et al., 2004).As the results of the pilot survey meets the required standard, greater than 0.6, the original scales of the pilot survey adopted for the real survey without any modifications. This results reveals that the scales adopted for the study are reliable.

Exploratory Data Analysis

According to Pollard et al(2016) EDA is a fundamental early step after data collection and pre-processing, where the data is simply visualized, plotted, manipulated, without any assumptions, in order to help assessing the quality of the data and building models. There are many ways to categorize the many EDA techniques. Accordingly, the Missing values, Linearity, Outliers, Normality and Multicoliniarity of the data set were examined prior to the data analysis and results confirmed the quality of data for the subsequent analysis. The results of

muticoliniarity presented in table 4 which verifies the non-existence of multivoliniarity issues.

Univariate Analysis for Dependent Variable

The following Table 3 depicts the descriptive statistics for dependent variable, Readiness to adopt BDA.

Table 3: Descriptive Statistics for Dependent Variable

	N	Mean	Std. Deviation
Readiness to adopt BDA	111	2.70	.553
Valid N (listwise)	111		

Source: Survey Data (2019)

According to above statistics, the overall mean value for Readiness to adopt BDA is 2.70 and the SD is 0.553. Therefore, it can be identify that the private companies in Sri Lanka are having lower level of readiness towards BDA

Multivariate Analysis

Many statistical techniques focus on just one or two variables. Multivariate analysis techniques allow more than two variables to be analyzed at once. The ultimate goal of these analyses is either explanation or prediction, i.e., more than just establishing an association (Kumar et al,2013).The researcher executed correlation and multiple regression analysis to identify the association and nature of the association between the study variables. Correlation Analysis Correlation, also called as correlation analysis, is a term used to denote the association or relationship between two (or more) quantitative variables.

Similar to the measures of association for binary variables, it measures the ―strength‖ or the ―extent‖ of an association between the variables and also its direction. The end result of a correlation analysis is a Correlation coefficient whose values range from -1 to +1. A correlation coefficient of +1 indicates that the two variables are perfectly related in a positive [linear] manner, a correlation coefficient of -1 indicates that two variables are perfectly related in a negative [linear] manner, while a correlation coefficient of zero indicates that there is no linear relationship between the two variables being studied (Gogtay and Thatte, 2017). The outcomes of correlation analysis presented in below Table 4.

Table 4: Results of Correlation Analysis

		Readiness to adopt BDA
Reliability	Pearson Correlation	.073
	Sig. (2-tailed)	.450
IT Infrastructure	Pearson Correlation	.376**
	Sig. (2-tailed)	.000
Security	Pearson Correlation	.225*
	Sig. (2-tailed)	.019
Management Support	Pearson Correlation	.376**
	Sig. (2-tailed)	.000
Firm Size	Pearson Correlation	.225*
	Sig. (2-tailed)	.019
Finance Resources	Pearson Correlation	-.121
	Sig. (2-tailed)	.211
Regulatory Support	Pearson Correlation	-.183
	Sig. (2-tailed)	.057
Competitive Advantage	Pearson Correlation	.204*
	Sig. (2-tailed)	.033
Environmental Uncertainty	Pearson Correlation	-.152
	Sig. (2-tailed)	.114

Source: Survey Data ,2019

According to the statistical decision, there is a positive correlation between IT Infrastructure, Security, Management Support, Firm Size and Competitive Advantage and Readiness to adopt BDA. IT Infrastructure (p=.000) and Management Support (p=.000) found to be significant at 99% confidence level. Security (p=.019), Firm Size (p=.019) and Competitive Advantage(.033) recorded as significant at 95% confidence level. The results revealed a statistically significant relationship between IT Infrastructure, Security, Management Support, Firm Size and Competitive Advantage with Readiness to adopt BDA. Hence, test statics support the

link assumed in the model by hypothesis H2, H3, H4, H5 and H8. Further Reliability, Financial Resources, Regulatory Support and Environmental Uncertainty found to be insignificant and therefore the hypothesis H1, H6, H7 and H9 were rejected.

Multiple Regression Analysis

According to Kumar et al(2016), in multiple linear regressions, several independent variables are used to predict with a least square approach one direct variable. While correlation analysis helps in identifying associations or relationships between two variables, the regression technique or regression analysis is used to —modell this relationship so as to be able to predict what will happen in a real-world setting. Multiple linear regression on the other hand can be used when we have one continuous dependent variable and two or more independent variables (Thatte et al, 2017). The results of multiple regression analysis of the study illustrated in following tables.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.473[a]	.224	.170	.504

a. Predictors: (Constant), Reliability, Infrastructure, Security, Management,Size, Finance, Regulatory, Advantage, Uncertainty

Source: Survey Results (2019)

Table 6: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.388	7	1.055	4.160	.00
	Residual	25.621	101	.254		
	Total	33.009	108			

a. Dependent Variable: Readiness to adopt BDA

b. Predictors: (Constant), Reliability, Infrastructure, Security, Management, Size, Finance, Regulatory, Advantage, Uncertainty

Source: Survey Results (2019)

Table 7: Results of Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	-.780	1.033		-.756	.452
	Reliability	.080	.066	.110	1.213	.228
	Infrastructure	.448	.102	.384	4.409	.000
	Security	.275	.101	.237	2.728	.007
	Management	.466	.112	.399	4.174	.000
	Size	.324	.110	.280	2.951	.004
	Finance	.053	.097	.060	.549	.584
	Regulatory	-.105	.095	-.139	-1.103	.272
	Advantage	.098	.100	.014	.083	.034
	Uncertainty	.077	.091	.118	.836	.405
Source: Survey Results (2019)						

According to the results of multiple regression analysis, the adjusted R^2 value recorded as 0.224 which indicates 22.4% of the variation in the Readiness to adopt BDA can be explained by study predictors. The p-value is significant (0.000) which indicates fitness of the model for the study. Among the study predictors, IT Infrastructure, Management Support, Firm Size and Security gave the highest contribution towards Readiness to adopt BDA. According to the findings the highest beta coefficient is recorded by IT Infrastructure that is 0.448 then Management Support, Firm Size and

Security recorded as 0.466, 0.324 and 0.275 respectively. The lowest contribution is recorded from regulatory support (- 0.105) and financial resources (0.053).

4. DISCUSSION

Out of the research objectives, the first and foremost objective was to identify the level of readiness to adopt BDA. According to the results of descriptive statistics, the overall mean value for Readiness to adopt BDA is 2.70 and the SD is 0. 553.It reveals that Sri Lankan private companies are showing low tendency towards BD readiness. Thereby the

researchers achieved the first objective by identifying the level of BD readiness in private sector organizations. The second objective was to identify the technological, organizational and environmental factors relating on readiness to adopt BD analytics in private companies, Sri Lanka. Accordingly, the researchers performed correlation analysis and the results indicated that five studied variables are having significant relationship with BD readiness. Thereby IT infrastructure, security, management support, firm size and competitive advantage could

to adopt BDA. These research findings are in line with those of other prominent researches in the area of BD technology; Dasananyaka et al(2018), Kalema & Mokgadi(2016), Cooper & Robert(1990), Tsai et al(2010), Agrawal (2015), Cohen & Levinthal(1990), Almoqren & Altayar(2016).

5. CONCLUSION

This study sought to investigate organizations readiness for adopt BD analytics. Organizational readiness is a critical scenario, as it governs optimal implementation of technology (Venkatesh et al., 2003; Rafferty et al., 2013). Results of this study have indicated that there is low level readiness towards BDA by private sector 65 companies in Sri Lanka. IT infrastructure, security, management support, firm size and competitive advantage of the organization plays a good role in its preparedness for BDA. Optimal

be deemed as important in preparing for BDA. The factors reliability, financial resources, regulatory support and environmental uncertainty depicted insignificant relationship with readiness to adopt BD. Thereby the researchers were able to achieve the second research objective. The third objective was to investigate effect of identified variables on readiness to adopt BDA. Multiple regression analysis was executed and IT infrastructure, security, management support, and firm size were found to be significant predictors of Readiness implementation of a technological innovation is paramount for its success. Results of this study further indicated that for optimal implementation, organizations have to play their parts diligently and get involved in the changing process. Hence, readiness should embrace communication between the stake holders of an organization so that they work in a holistic manner. This is essential especially for organizations in developing countries that operate with limited resources. More still, due to heterogeneous challenges, it is rare to find smooth, linear and longitudinal technology shifts in organizations of developing countries like Sri Lanka. Hence, readiness assessment for any technological innovation should examine all relevant factors ranging from individual to organization to global.

The findings of this study indicated that organizations need to pay

attention to many factors and go through organizational, technological, and environmental changes if they are to be ready and feverishly explore ways of benefitting from BD analytics. It is only by doing so that they will be able to gain capability of creating strong competitive advantages. BD are often portrayed as a potential opportunity for organizations regardless of their nature. Many organizations, especially big firms in developed countries, are already benefitting from BD analytics (Kalema & Motau, 2016). However, literature indicates that traditional technologies are struggling to match up the velocity, variety and volume at which BD are generated. Leveraging the findings of this study, organizations will be in position to know what to do, when to do it and how when they are faced with situations of BDA. Hence, this study contributes to the scanty academic literature of BDA, as its findings will be used by management to make informed decisions regarding BDA.

This study provides relevant academic insights as it incorporates the TOE Model to explain the readiness to adopt BDA. The theoretical implications stem from the fact that conceptual model tested in this study will be added to the existing body of knowledge on readiness for BDA. And it can be used by future researchers for their research studies in different contexts. This will contribute to the information technology body of knowledge where there are limited literature in the arena of BDA. The study reviewed the literature and identified factors that could influence organizations to make sound technological decisions before adopting BD Analytics innovations. This implies that this study makes a significant contribution to practice and management of the assessment of BD Analytics readiness. The practical contributions are considered, the research model used in this study will have managerial implications for practitioners in formulating better strategies for BDA readiness. Using the research model of this study could assist top level managers in enhancing their understanding of pre-conditions needed to consider for the successful preparation of BDA. Furthermore, results from this study could be applied not only to assessment of BD Analytics but generally to any new technology in an organization.Future researchers are encouraged to increase sample size and widen the representativeness in sectors to make a more generalize conclusion. Further, researchers are encouraged to consider the other related factors which may affect the BDA readiness through a thorough review of literature. They may also consider other possible and relevant mediating, moderating and controlled variables as well. Studies of readiness should involve several rigorous methods of data collection and future studies should leverage the use of other approaches like qualitative approach or mixed method.

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Big Five Personality and Employee Adaptability: A Study on Multigenerational Workforce in Banking Industry

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Abstract

Resilient banking sector is crucial for the development of economy. Developing adaptive and agile employees to navigate changes in technology, job roles, and job location so forth are the contemporary challenges faced by banking sector. Increasing employee adaptability is a highly concerned subject due to the personality differences of different generational workforce. The impact of big five personality traits on employee adaptability is slackly addressed phenomenon. Thus, study was done with the intention of investigating how big five personality traits impact on employee adaptability among targeted multiple generations; generation X, Y and Z. A deductive, cross sectional investigation was carried out. Conceptual model was developed through critical review of literature comprised neuroticism, extraversion, openness, agreeableness and conscientiousness as independent variables and employee adaptability as dependent variable. Questionnaire comprising 34 questions were circulated among sample of 240 and responses were assessed using five-point Likert scale. Simple random sampling method was used to select sample which comprised bank executives in both government and private commercial banks in Sri Lanka. Generation wise multiple regression analysis and ANOVA multi group comparisons were used as major data analysis techniques. Results concluded that, the impact of big five personality traits on employee adaptability vary among generations. Study contributed existing body of knowledge by addressing area where gap exist in theory and context. Guidance for practitioners were offered exploring generation wise conceptual models while portraying practical and actionable recommendations crucial for management.

Keywords:- Big Five Personality Traits, Employee Adaptability, Multiple Generations, Banking Industry

1. INTRODUCTION

The banking sector is always deemed to be crucial for economic development of any country. As a key component in financial sector banks hold and invest in financial assets to leverage way to create more wealth. Moreover, banks involve in providing liquidity to whole economy while mitigating and transforming risk characteristics of assets. To name a

few providing payment services, facilitating entities to carry out transactions, transferring funds from savers to borrowers in an efficient manner are other some key services carryout by banks.

Sound banking sector is crucial for the sustainability of financial sector irrespective of the country. In Sri Lanka as a developing country, banks play a vital role in developing infrastructure financing, initiating rural development activities from the root level so forth. In Sri Lanka sustainability of any industry depend on the quality of workforce since Sri Lankan economic system largely rely on human capital. Quality of workforce fluctuate due to various concerns. As an industry which brings out regular innovations.

Low employee adaptability deemed to be a dynamic issue face by banking industry. Now a days organizational environments are rapidly changing and employee adaptability is extremely important to upgrade organizational performance, enhance competitiveness so forth (Dam, 2009). According to Earnst and Young (2018) every bank is working towards improving operational efficiencies and customer experience and there are various technologies emerge like process automations and adaptive intelligence.

According to the complexity in present context people need to perform at least four or five careers relatedly in the bank rather than sticking into one role, which made need in adaptive employees to face these changes successfully. Evidence obtained through pilot study proved

that there is an issue regarding employee adaptability since employees get transfers in regular time intervals like every five year and job rotations among lower counter, cashier, credit section, pawning section so forth is so hard. As an industry which bring out regular innovations to sustain in the market low employee adaptability would become as a key issue. Frontline employees need to adapt to differing demands to represent organization in positive manner.

Among the factors which make considerable impact on employee adaptability, researchers identified big five personality traits as an important area to discuss. Previous studies revealed that personality made an impact on job performance, customer loyalty, reduce turnover, bank profitability so forth (Rashid, Sah, Ariffin, Abdul, & Muhamad, 2016). It led to provoke researchers' interest towards the area.

Labor force in bank consist employees belong to different generations and generational differences emerged as a dominant area discuss by researchers in present context. In every point of history, workforce comprised employees belong to different generations (McKinlay & Vicki, 2010). According to Half (2017) managers should see building a diversified team with new perspectives as a plus point and managers need to identify multigenerational differences on various perspectives. In light to the above facts previous studies conducted by UK Essays (2018) and Ludviga & Irina (2016) revealed that

there are employee adaptability differences prevail among generations.

Considering above facts researchers cascaded the target group into three generations: generation X, Y and Z which the bank staff constitute of to conduct study in a broader perspective. Importance of banking sector as a main arm in financial sector along with the researchers' interest in studying psychological aspects profoundly motivated researchers to conduct the study. Key objective of conducting the study was to study how the personality traits of different employee generations effect on their adaptability. Moreover, to study how the generational differences of employee adaptability is effected by their personality traits is the next objective of the study.

Selection of banking industry for the study was justified by the fact that Sri Lankan banking industry comprise about 40% of total workforce (UK Essays, 2018). Selection of Colombo surburb branches were based on the criteria that majority of banking outlets were located in Colombo accounting 960 branches according to central bank reports. Researchers selected every element of the study based on strong justifiable criteria with the intention of enhancing standard of research.

However, research found a gap exist in study area in terms of theory and research context. Due to the availability of limited literature researchers tried to bridge the knowledge gap by providing

practical, theoretical and contextual contribution from the research. Outcome of the study benefit different fields of interest like future researchers, policy makers and banking industry since it provides valuable insights on each key dimension. As human capital is the most important element of any organization, identifying and upgrading value of human capital is important, especially in service sector. In service sector quality of the service is assessed at the point where employee – client interacts and at that touchpoint client tend to examine the way employee talk, behave, respond to urgent matters, gestures, postures etc. Researchers conducted the study targeting a giant in service and finance industry; banking industry because banking industry is an industry where personality matters most. Since bankers must undergo frequent changes related to job tasks, working environments, technology etc. employee adaptability has become a significant area which banking industry focus most.

The findings of the study enable to identify how selected sub elements of each personality trait contribute to upgrade employee adaptability. At the same time provides the identification of generational impact of big five personality traits on employee adaptability. Furthermore, finding of the study will assist to improve employee adaptability by upgrading relevant personality traits. Implementers, policy makers in banks can use the results of the study as a reference guide when designing personality development trainings and when designing organizational

policies. Results of the study aid other interested party by providing valuable insights useful for academic purposes and when developing prudent initiatives to overcome generational based employee adaptability issues.

1.1 Theoretical Background

Personality can be defined as an individual's preferred or typical way of behaving, thinking and feeling (Wong, Gardiner, Lang, & Coulon, 2008). Employee's personality determine how they will react in certain situations and what training and managing approaches are most effective for them. Personality trait is a stable characteristic pattern of behavior, emotions and thoughts which can describe individual's behavior in each situation (Sripom, Rungswang, Sukwitthayakul, & Chansri, 2019). There are some trend that can be found when one was born, grew up and which affects personality traits and perspectives (Durisko, 2018). One of the popular term associated with personality is "Big Five" coined by scholar Goldberg in 1976. According to him five factors consist neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. Neuroticism means individual's emotional stability and tendency to have negative emotions. People with high score in neuroticism are likely to worry, angry, depressed, fear and have anxiety and people with low score are more relaxed, calm and secure (Sripom, Rungswang, Sukwitthayakul, & Chansri, 2019). Extraversion express person's assertiveness, emotional expression

and comfort levels in certain situations (Grohol, Psych Central, 2019). Conscientiousness refers to individuals who demonstrate traits of self-control by means of being capable of planning, organizing and working strategically towards achieving goals (Rodrigo & Jayasekara, 2016). Agreeableness is a characteristic associated with being friendly, caring and corporative. People who possess high score in agreeableness tend to be get along with others while people with low score tend to be more skeptical competitive and distant. Openness to experience refers to extent to which people take risks and take an interest in new experiences. People who possess high openness have high flexibility, curiosity and imagination while people with low score tend to be conservative, traditional and practical (Sripom, Rungswang, Sukwitthayakul, & Chansri, 2019).

Employee adaptability refers to "employee's underlying potential as derived from cognitive, affective and behavioral resources that can be applied to effectively adjust and or anticipate to task related, environmental and vocational demands" (Dam, 2009). According to career construction theory adaptability is a core psychosocial resource or transactional competency necessary for achieving adaptive goals (Yang, Feng, Meng, & Yong, 2019).

Findings of Dam (2009), Spiro & Weitz (1990), Whiler, Meurs, Daniela, Troll, & Bilckle (2017), Huang, Ryan, Zable, & Palmer (2013), Dursun, Tahir, & Mehpare

(2017) identified personality traits that have an impact on employee adapatability. According to Echchakoui (2013) conscientoiusness, agreeableness and emotional stability postively associated with employe adapatbility and extraversion and openness negatively affect employee adapatbility. Another study revealed self mintoring, interpersonal control and openning positively correlate with adaptive behaviour while rigitidy negatively correlate with adaptive behaviour (Verbeke, 1994). A study conducted by Griffin & Hesketh (2005) stated that only achievement facets of conscientiousness relate to employee adapatability. Furthermore, studies conducted by Psych Tests (2015), Donnellan & Lucas (2008), Zahari (2016), Grohol (2019), Durisko (2018) found generational differences in personality traits. When considering employee adapatbility Earnst and Young (2018) and Ludviga & Irina (2016) found generational differences in employee adapatbility. Accordingly, research hypotheses were developed as;

H_1: Employee adoptability of generation X is significantly affected by their personality dimensions.

H_2: Employee adoptability of generation Y is significantly affected by their personality dimensions

H_3: Employee adoptability of generation Z is significantly affected by their personality dimensions

H_4: There are generational differences of employee adaptability and employee personality dimensions

2. METHODS

Researcher adopted quantitative enquiry as research approach and used structured questionnaire as research instrument to obtain data from sample. Structured questionnaire was cascaded into two sections where researcher measured demographics under first phase while measuring personality traits and employee adaptability using five-point Likert scale under second phase. Cronbach's alpha values for neuroticism, extraversion, openness, agreeableness, conscientiousness and employee adaptability were 0.969, 0.968, 0.973, 0.965, 0.975 and 0.991 respectively indicating excellent level of reliability according to Gliem & Gliem (2003).

Study confined the target population to all bank executives in Colombo suburb branches to derive better results from a representative sample. Due to unavailability of reliable sources unknown population was assumed and selection of sample was based on Green's recommendation (1991). Simple random sampling method was applies to select 240 bank executives in five leading banks including both government and private banks. Number of responses were 208 yielding a response rate of 86.6%. Researchers conducted cross sectional analysis in natural study setting with minimum interference to yield results. Researchers used both inferential and descriptive statistics to produce the results and multiple regression, ANOVA multi group comparisons were used as main data

analysis techniques to test hypothesis developed under the study.
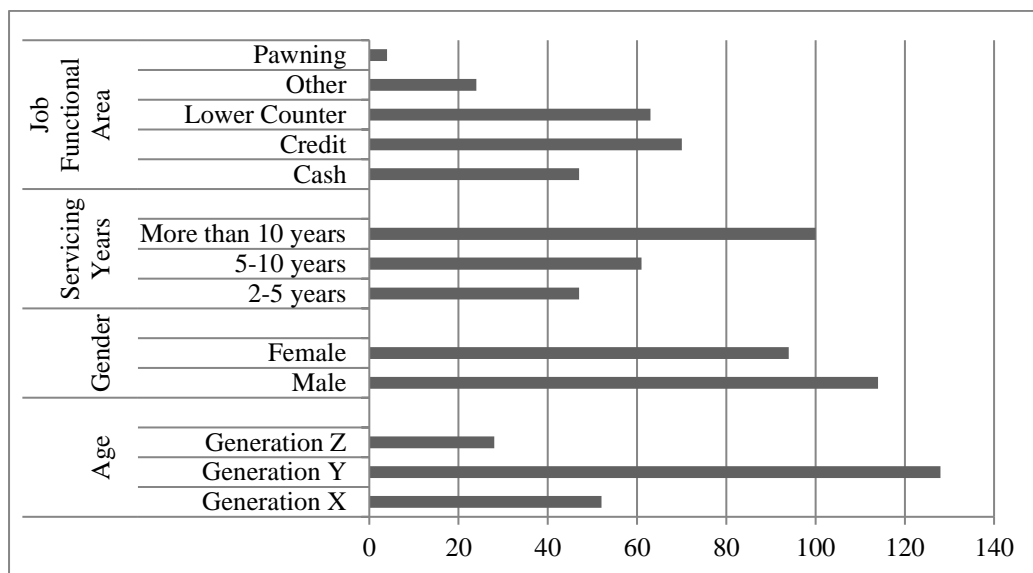
2. RESULTS

Figure 1: Demographic Data of Sample

Source: Survey data, 2020

Figure 1 exemplify demographic data of sample assessed with the aim of identifying generational and gender composition of sample along with job functional area and service period. According to the results majority of respondents were belong to generation Y and mainstream were male. Sample composition included 48% employees work over 10 years which steered to upgrade exactitude of research. As diagram depict job functional area diversified across several functions.

Test of Hypotheses

In order to test the developed hypotheses multiple regression analysis was performed. Initially, the study aimed at testing heteroscedasticity, multicollinearity and autocorrelation to assess whether data set is free from heteroscedasticity, multicollinearity and autocorrelation problem. Researchers checked heteroscedasticity based on Breusch - Pagan test and according to the results of Breusch - Pagan test ANOVA significance values were greater than 0.05. The results supported null hypothesis and the results concluded that data is

homoscedastic (Breusch & Pagan, 1979). According to the output of multicollinearity test, all five variables indicated VIF values below 10 and concluded data set is free from multicollinearity problem.

Durbin – Watson values for all five variables were in line with the rule according to Statistics solutions (2020) and concluded that there were no autocorrelation problem in data set. Further, Skewness, kurtosis values and PP plots proved normal distribution of data according to Rose, Spinks (2015) and Hair, Hult, Ringle, & Sarstedt (2015). Pearson's Correlation table and linearity diagrams proved linearity of the sample. Results of the multiple regression were shown in the following tables

Table 1: Multiple regression analysis predicting employee adoptability of generation X employees' personality

Model Summary					
Model	R	R Square	Adjusted R Square	F change	Sig
1	.93	.87	.86	64.90	.00

Source: Survey data, 2020

Table 2: Statistical output of the multiple regression analysis

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.43	.19		2.21	.03
Neuroticism	.64	1.0	1.75	1.52	.13
Extraversion	.86	.60	.91	1.41	.16
Openness	.41	1.9	-6.11	-2.90	.00
Agreeableness	.20	.62	.22	.33	.74
Conscientiousness	.25	1.07	4.14	3.59	.00

Source: Survey data, 2020

According to the table 1, adjusted R square of the model is 0.86. That means employee personality dimensions in the model explain 86% of the total variance in the dependent variable of employee adoptability. Table 2 shows the regression coefficients of the independent variables with their significance. It shows that of Neuroticism, Extraversion and Agreeableness have become insignificant. Openness dimension has the strongest Beta value at 0.41 implying that there is a positive impact with the employee adoptability. Next,

consciousness dimension has a Beta value of 0.25 implying that there is a positive impact on employee adoptability. In relation to hypothesis 1, that argue employee adoptability of generation X is significantly affected by their personality dimensions, it was revealed that both openness and conscientiousness have a positive influence on employee adaptability of generation X.

Table 3: Multiple regression analysis predicting employee adoptability of generation Y employees' personality

Source: Survey data, 2020

Model Summary						
Model	R	R Square	Adjusted R Square	F change	df	Sig
1	.97	.95	.95	533.8	5	.00

Source: Survey data, 2020

Table 4: Statistical output of the multiple regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.26	.09		2.84	.00
Neuroticism	.38	.10	.39	3.80	.00
Extraversion	.20	.07	.20	2.83	.00
Openness	.09	.03	.12	2.60	.01
Agreeableness	-.29	.13	-.30	-2.13	.03
Conscientiousness	.54	.11	.58	4.90	.00

Source: Survey data, 2020

According to the table 3, adjusted R square of the model is 0.95. That means employee personality dimensions in the model explain 95% of the total variance in the dependent variable of employee adoptability. Table 4 shows the regression coefficients of the independent variables with their significance. It revealed that of all the personality dimensions have become significant. Conscientiousness dimension has the strongest Beta value at 0.54 implying that there is a strong positive impact on the employee adoptability. Secondly, Neuroticism dimension has

a Beta value of 0.38 implying that there is a positive impact on employee adoptability. Thirdly, agreeableness dimension has a beta value of -0.29 implying that there is a negative impact on employee adoptability. Next, extraversion dimension has a Beta value of 0.20 implying that there is a positive impact on employee adoptability. Then openness dimension has the lowest Beta value of 0.09 implying that there is a lower positive impact on employee adoptability.

In relation to hypothesis 2, that argue employee adoptability of generation Y is significantly affected by their personality dimensions, it was revealed that Neuroticism, Extraversion, Openness and Conscientiousness have a positive influence on employee adaptability while Agreeableness has a negative influence on employee adaptability of Y generation.

Table 5: Multiple regression analysis predicting employee adoptability of generation Z employees' personality

Model Summary						
Model	R	R Sq.	Adjusted R Square	F change	df	Sig
1	.98	.97	.96	172.49	5	.00

Source: Survey data, 2020

Table 6: Statistical output of the multiple regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.49	.53		2.79	.01
Neuroticism	.74	.14	.75	5.24	.00
Extraversion	-.01	.06	-.01	-.30	.76
Openness	.76	.16	.89	4.77	.00
Agreeableness	-.52	.19	-.62	-2.68	.01
Conscientiousness	-.26	.11	-.11	-2.31	.03

Source: Survey data, 2020

According to the table 5, adjusted R square of the model is 0.96. That means employee personality dimensions in the model explain 96% of the total variance in the dependent variable of employee adoptability. Table 6 shows the regression coefficients of the independent variables with their significance. It revealed that of all

the personality dimensions except Extraversion have become significant. Openness dimension has the strongest Beta value at 0.76 implying that there is a strong positive impact on the employee adoptability. Neuroticism dimension has a Beta value of 0.74 implying that there is a strong positive impact on employee adoptability. Agreeableness and Conscientiousness dimensions have a beta value of -0.528 and -0.268 implying that there is a negative impacts on employee adoptability.

In relation to hypothesis 3, that argue employee adoptability of generation Z is significantly affected by their personality dimensions, it was revealed that Neuroticism and Openness have a positive influence on employee adaptability while Conscientiousness and Agreeableness have a negative influence on employee adaptability of Z generation. Further, Extraversion dimension is no longer a valid dimension in predicting the employee adoptability of generation Z. ANOVA multiple comparisons were used to assess whether there is a difference in personality dimensions and employee adaptability among generation X, Y and Z.

Table 7: ANOVA Multiple Comparison - Employee Adaptability

Multiple Comparisons						
Dependent Variable: Employee Adaptability						
Tukey HSD						
(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Gen. X	Gen. Y	-.95	.09	.00	-1.19	-.72
	Gen. Z	-1.15	.14	.00	-1.48	-.82
Gen. Y	Gen. Z	-.19	.12	.25	-.49	.09
*. The mean difference is significant at the 0.05 level.						

Source: Survey data, 2020

According to table 7 there was a mean difference in employee adaptability among generation X and Y, X and Z since significance values were .000 which was less than 0.05 and there was no mean difference in employee adaptability among generation Y and Z since significance value was .259 at significant level 0.05.

In relation to hypothesis 4 that argue there are some generational differences of employee adaptability and employee personality dimensions is accepted based on the above statistical finding.

4. DISCUSSION

Employee adaptability issues are rising in Sri Lankan banking context. Impact of big five personality traits on employee adaptability targeting multiple generations were not being subjected to significant empirical research previously. Results of the quantitative study revealed that impact of big five personality traits on employee adaptability vary among generations in terms of direction and magnitude of impact while some variables remain non – impacting.

When considering the results of the study researchers found that openness positively impact on employee adaptability of generation Y and Z and it was compatible with the findings of Dam (2009), Spiro & Weitz (1990), Verbeke (1994). However, openness showed negative impact on employee adaptability of generation X and it was compatible with the findings of Echchakoui (2013). Extraversion showed an impact on employee adaptability generation Y and it was compatible with the findings of Wihler, Meurs, Wiesmann, Troll, & Blickle (2017). Conscientiousness showed positive impact on employee adaptability of generation X and Y and negative impact on employee adaptability of generation Z. However, according to Griffin & Hesketh (2005) only achievement facets of personality associate with employee adaptability.

As practical contribution findings of the study derived actionable and prudent implications for the bank management while providing theoretical contribution for future

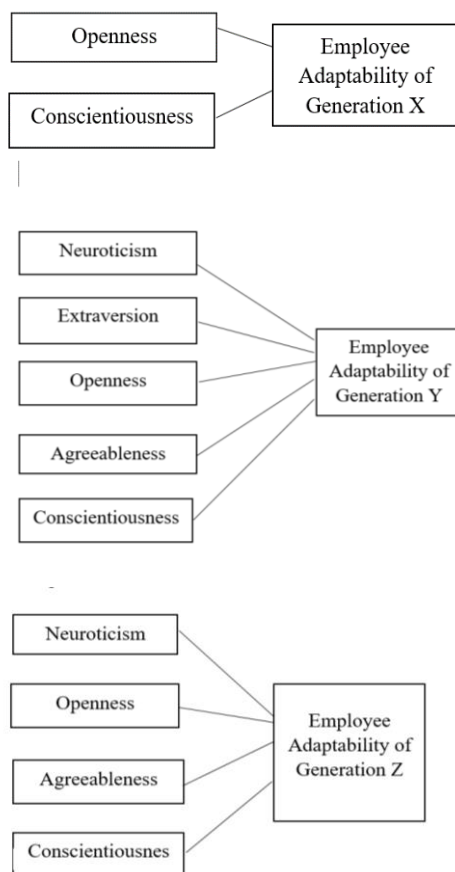researchers by deriving three separate models for generation X, Y and Z.

Figure 1: Conceptual framework

As per the results of multiple regression analysis, neuroticism did not make an impact on employee adaptability of generation X, but it made a positive impact on employee adaptability of generation Y and Z. Moreover, neuroticism made high impact on employee adaptability of generation Z than generation Y. Under neuroticism researchers measured ability to deal with stress, level of self-consciousness, level of stability in personality and level of job security since these dimensions

lead to reduce neurotic nature of people. Since neuroticism made positive impact on employee adaptability of generation Y and Z, development of a proper mechanism is needed to enhance it. Since bankers are engaging in highly stressful financial activities by nature there is need to develop employee's ability to cope up with stress. In that manner it is suggested to provide employees paid compulsory leave and social support while not giving excessive workloads and unclear performance expectations. Moreover, enhancing self-consciousness of employees by pushing towards a system where each employee can learn to be responsible while accepting open criticism is needed. As well as enhancing job security by cultivating a secure atmosphere and by linking employees with future goals and orientations of the bank, the desired outcome can be achieved.

When considering multiple regression results of extraversion, it showed a positive impact on employee adaptability of generation Y and it did not show an impact on employee adaptability of generation X and Z. Under extraversion researchers measured level of friendliness, level of self-confidence, level of social confidence and ability to articulate as key indicators. To improve level of friendliness it is necessary to encourage employees to adhere to team-oriented approaches by arranging staff get together, trips etc. To develop self-confidence of employee's need arises to treat them with respect while encouraging employees to learn through mistakes. Proper mentoring program can yield

good results. Providing a proper training and a timely feedback, developing open communication, celebrating employee's improvements would yield good results by developing social confidence.

When considering openness, it showed openness have negative impact on employee adaptability of generation X while it makes positive impact on employee adaptability of generation Y and Z. Under openness researchers tested preference for new ideas and changes, level of creativity, insightfulness and openness to various values and beliefs as key aspects. Under the trait openness since generation X resulted a different outcome when compared to generation Y and Z there is need to get thorough understanding about generation X's perspective about openness. In detailed analysis should target generation X to assess whether these key differences are inherent to generation or whether there are some other reasons that influenced their perspective. Regarding generation Y and Z, making employees' awareness about changes while encouraging them to be a part of change management process would make feel important and notable while eliminating conflicts regarding changes. Each action in change management process should be followed by a strong justification to make employees feel that changes are crucial for organizational success. Train employees to adhere to a culture where each employee will treat with equal respect and dignity irrespective of religion, age, gender etc. is needed. Proper cultural

orientation should be developed within the organization to enhance employee adaptability.

Trait agreeableness showed negative impact on employee adaptability of generation Y and Z. However, agreeableness did not make an impact on employee adaptability of generation X. Under agreeableness researchers used level of politeness, cheerfulness, consideration and level of helpfulness as indicators. There is need to conduct an in-depth analysis to identify the reasons behind the answers. Management should assess employee's perspectives to facilitate them with necessary guidelines and actions.

When considering conscientiousness, it spelled out positive impact on employee adaptability of generation X and Y. According to beta coefficients it showed conscientiousness have high impact on employee adaptability of generation X than Y. Conscientiousness showed negative impact on employee adaptability of generation Z. Under conscientiousness researchers measured self-discipline, level of reliability, capability of working strategically and hardworking ability. For the executives belong to generation X and Y, there is need to develop rules to enhance self-discipline and teach and appraise good behavior. These rules should be aimed at developing employee morale to encourage and to behave ethically with good discipline in the workplace. To enhance reliability of work, clear and realistic policies and tasks need to be developed while

offering flexible and enjoyable working environment. To improve employee capabilities while encouraging them to work hard utilization of right technologies and strategies are needed. Furthermore, empowering employees with decision making power while clearly communicating expectations is essential. Appraisal mechanism directed towards career success or financial rewards can improve hardworking ability of employees and then adaptability.

5.CONCLUSION

Researchers attempted to bridge the knowledge gap by conducting the study since there were only few researches done on the area discussed. Researchers made a contextual contribution by grounding the study on banking sector. Bank management should focus on each aspect in depth along with the recommendations provided by the researchers to mitigate issues prevail in the organization in terms of subject area discussed to bring more value to the table.

It is reasonable to state that every research has limitations irrespective of the area of study. It might be because researchers could not possibly bring the whole perspective of an area in one fine study. Hence, like other researches the present research endeavor also suffers from some limitations. If discuss limitations researchers used quantitative method in the study to assess the impact of big five personality traits on employee adaptability. However, personality traits are a subjective topic, it is more

appropriate to use mixed method for study to obtain detailed information about the aspects researchers wish to investigate further. Also, study suggests to use more cross verification-based questions to reject answers which does not match with previous answers. Furthermore, future researchers can target other industries, other provinces and other employee categories that may suffer with employee adaptability issues. Moreover, future researchers can conduct this study as a longitudinal study rather than conducting a cross sectional study to provide respondents more time to respond and to motivate them to give more accurate answers while yielding high response rate.

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Employee Intention to Stay in Colombo Based Information Technology Industry: An Investigation on The Impact of Employee Retention Factors

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Abstract

Employee Retention is considered to be a major concern any industry where the employee turnover rate tends to be higher. When it comes to the Information Technology (IT) industry (where in Sri Lanka or at global level), there is a visible trend in the employee turnover when compared to the other industries. More specifically, the employee turnover of IT industry employ has been identified as a crucial issue in the Asian context including Sri Lanka. The main purpose of this paper is to identify the impact of some selected employee retention factors on employees' intention to stay within the IT companies of the Colombo Suburbs, Sri Lanka. A model was designed and the hypotheses were empirically tested from data collected through a survey. Correlation and multiple regression analysis were carried out to test the association and the degree of impact of the selected employee retention factors on Employees' intention to stay. The analysis results indicated that all the three independent variables (Employee Career Progression, Organizational Culture, and Flexible Working Hours) are positively associated with the dependent variable. The findings of this research also indicate that, career progression and flexible working hours has a high degree of impact on employees' intention to stay where the organizational culture has only a negligible impact on the employees' intention to stay. The research results will have implications for any IT organization operating within the Colombo Suburbs. This research also opens up new opportunities for academicians in studying cross-linkages among the various key factors identified by the study.

1. INTRODUCTION

Effective employee retention is a systematic effort made by employers to create and foster an environment that encourages employees to remain employed in the current organization. Employee retention helps have satisfied employees, to increase sales and to preserve the best knowledge base within the company. The

outburst of the concept of employee turnover which is also known as the lack of employee's intention to stay, has created a new perspective for the companies especially in the IT industry to search for new and better ways to retain their best talent without letting them go into the hands of the rivals.

The present study mainly focusses on the IT industry where one of the major drivers of global IT industry is identified as the technically skilled staff. Sri Lanka's ICT workforce has grown by 42,019 employees since the last project of 82,854 in 2014 to reach 124,873 in 2018. This implies 50.7 % growth during the period concerned at Compound Annual Growth Rate (CAGR) of 10.8% (LBO, 2019). Even though there is a significant growth in the IT workforce, it is also really challenging to retain the staff. Therefore, it is evident that Employee Turnover is one of the most common problems in the IT industry. Due to the high amounts of employee turnover in various contexts (Global, Asian and Local), the employee retention has become a real challenge. The global IT industry employee turnover counts up to 13.2% and there is also a constant growth in the annual turnover rate globally. Nearly 50% of the employees leaving the job are leaving for jobs in the same industry for better packages and benefits. As an average, the IT industry employee turnover rate from 2013 to 2018 is at 23%(Florentine, 2019).

Same as the global context, there is a significant increase in the turnover rates in most of the Asian countries too. The turnover rates in main Asian markets can be listed as; India 13.6%, Malaysia 13.0%, Australia 12.4%, Singapore 11.7%, Hong Kong at 11.3% and China at 10.8% (Asia One, 2017). It is also observable that job-hopping has become the new attitude of Asian employees. This is also supported by the number of years' employees these days stick with one company which is 2-5 years (Getzoff, 2020).

The problem then triggers down to Sri Lankan context too.ICT workforce in Sri Lanka is currently undergoing deep structural changes and the future growth of the ICT sector is highly dependant on the availability of a skilled workforce (ICTA, 2019). Employee Turnover in the Sri Lankan IT industry shows a growing trend from past, where overall employee turnover of IT workforce has been doubled from 6.6% in 2004 to 13% in 2006 (ICTA, 2019). To be more specific, this problem mainly exists in the Colombo suburbs. The main reason for the researcher to choose the Colombo suburbs was because, most of the IT-related companies are situated in Colombo. Where Colombo was ranked among "Top 20 emerging cities"(Wikipedia, n.d.). This is because the industry is rapidly progressing towards a quality destination where most of the recent developments of ICT firms such as, Virtusa (Orion City- Dematagoda), WSO2 (Colpety- Colombo), Millenium IT (Malabe- Colombo), Pearson Lanka and Wiley (Maga one – Nawala) are mainly established in Colombo(SLASSCOM, 2014).From the existing evidence, it was also

clear that the problem of Employee Turnover was mainly in the middle level employees, where most of the people were having a tenure for about 5- 7 years in the current organization and had emerging family responsibilities. The main drawbacks of employee turnover in the IT industry were the loss of knowledge to the company, training and development cost and the damage for the employer brand image.

Certain measures like induction programs, free online resources were taken to minimize the Employee Turnover and to improve Employee Retention. But all of them have not always given successful results. Also, the studies done within the Sri Lankan context is very limited and there is still a clear gap for extensive studies.

Therefore, there is no sufficient knowledge on the impact of the employee retention factors (Organizational Culture, Employee Career Progression and Flexible Working Hours) on the Employees' Intention to stay in the IT companies in Colombo Suburbs.

In order to address the said problem and to bridge the gap of knowledge, the following research objectives were developed.

1. To investigate whether the factors of employee retention (Organizational Culture, Flexible work hours and Career growth) affect the employees' intention to stay of the middle level employees in IT industry in Colombo suburbs.

2. To identify the degree of impact of employee retention factors (Organizational Culture, Flexible work hours and Career growth) on employees' intention to stay of the middle level employees in IT industry in Colombo suburbs.

In order achieve these objectives; the researcher developed a conceptual framework and hypotheses with the support of existing literature.

It is proven that retention factors (Opportunity for growth, job security and other rewards etc.) have a direct relationship with job satisfaction and therefore, once the employee is satisfied with the job, there is a high tendency to have an intention to stay with the current employer (Das & Baruah, 2013). When taking each independent variable and its relationship with the dependent variable, there are plenty of comparable studies which have focused on them. Organizational culture has been identified as a high impacting factor for employee retention and employees' intention to stay than the factors of continuous commitment and normative commitment (J, N, & Begum, 2016).Person- Culture fit is related to employee commitment and satisfaction which results in employee's intention to retain in an organization(O'Reilly, Chatman, & Caldwell, 1991). Career development has been identified as the top reason for retention and have also proven

that there is an impact of employee career development in order for an employee to retain or leave an organization (Graham, 2017). In certain studies, it was founded out that the flexible working hours has a significant and a strong impact on employees' intention to stay in an organization(Sloan Center on Aging & Work at Boston College) . In 2013, Lahkar and Baruah stated that the main retention factors affecting employees' intention to stay in an IT Organization in the Colombo Suburbs are career planning and development, Flexible working hours, working conditions with leadership and supervision. There is also an empirical link between training and development, career development, compensation and performance appraisal and employees' intention to stay(Johanim, Yean, Adnan, & Yahya, 2012). Most of these studies are done in other countries of the world as stated above, and a very little amount of emphasis have drawn towards this area in Sri Lankan context. Therefore, there is a clear knowledge gap in this area specifically in the Sri Lankan context.

After an extensive review on existing literature, a conceptual model was developed to theorize and to show the logical sense of the relationship among the several factors that have been identified as important to the problem. From theoretical framework researcher identified that the independent variables of organizational culture, employee career progression and flexibility of working where Employees' intention to stay was identified as the dependent variable in the study.

2. METHODS

The present research is consisting of both correlational study and a causal study. This is identified as a correlational study simply because, the study attempts to identify the association of the employee retention factors and employees' intention to stay. At the same time, it is a causal study because, it attempts to establish a cause and effect relationship.

The population considered in this study is mainly the middle level employees of the top three IT firms in Colombo Suburbs, Sri Lanka. The researcher personally consulted each company to develop the sample frame. With the total population of 1580 employees, the researcher founded it difficult to conduct the study for the entire population. Therefore, a reliable and a valid sample of 307 middle level IT employees from three designated IT companies in the Colombo suburbs, was selected using the Morgan's table. The researcher has used the simple random sampling method which falls under the category of probability sampling where the selection of sampling units based on being randomly selectable and assessable by the researcher. Here, there is possibility for each and every element in the population to get a chance to get selected to the sample. For this study, the researcher would consider that all the respondents have uniform characteristics and have no any changes based on their perspectives for the study under consideration.

Established dimensions and instruments were used in order to

measure the independent variables of Organizational culture (OC) (Sheridan, 1992), Employee Career Progression (CP) (Gyanash & Guntai, 2018), Flexible Working Hours (FW) and the dependent variable of Employees' intention to stay (IS) (Johari, Yean, Adnan, Yahya, & Ahmad, 2012). Thus, it was considered to be the most suitable for the purpose of the study. As major dimensions of the dependent variable employees' intention to stay, can be stated as the Working hours, Satisfaction with the current job, etc. Similarly, the dimensions of the selected employee retention factors which include the Organizational culture can be identified as innovations, relationships, etc. The main dimensions of the Employee career progression are identified as the career path, promotion and professional ability development. In order to measure the Flexible working hours, the significant dimensions used are the shift, work schedule and rest time.

In order to collect the primary data required for the study, a structured questionnaire was distributed. The study collected data from IT industry employees through a questionnaire to find out, to what extent retention factors (Organizational culture, employee career progression and flexible working hours) impact on employees' intention to stay. So beyond distributing a questionnaire the researcher didn't interfere with the normal activities. The research was conducted in a natural environment with a minimum interference of the researcher with the normal flow of work.

The questionnaire consisted of two sections where one section collected the demographic information of the respondents and the second section was used to gather ideas about the selected employee retention factors and employees' intention to stay. The part two of the questionnaire were prepared on five points Likert scale and the questionnaire was developed in English Language. In order to collect the data, a set of questionnaires were given to the HR department of the three companies A, B and C to be presented to the set of selected middle level employees during their HR 1O1 meetings. The questionnaire was given by hand and collected at that point of time in order to ensure immediate response by the respondents and to secure the employee responses given. Even though the sample size was 307 employees, 350 questionnaires were distributed, considering the non-response rate in Sri Lanka. In order to collect the secondary data, different sources like journals, newspaper articles and government statistical reports were referred.

The basic steps followed in data analysis are; getting data ready for analysis, getting a feel for the data, testing the goodness of data and testing the hypotheses developed. The SPSS software was used in the process of data analysis. However, the respondent profile was analyzed. Initially, to analyze the respondent profile; various descriptive statistical tools such as the range, mean, standard deviation were used. Similarly, in order to have a better visual presentation of the respondent profile, the bar charts were used in

the study.

Prior to analyzing rest of the data, the researcher ensured that the data is fully ready for the purpose of analyzing. Here, the researcher mainly examined the data and identified any data entry errors, missing values, checked on any extreme or unusual values and finally a test for normality, linearity and multicollinearity was done in order to make sure the data is accurate and ready for an analysis. After ensuring that the data is appropriate for analyzing, the researcher paid more attention towards identifying the validity and reliability of the instruments. For this, the Cronbach's Alpha test was used. As the final step in analyzing the data, the hypothesis and the research model was tested. Accordingly, the researcher checks for the association between the variables by using the correlation analysis and impact of Independent Variables using the multiple regression analysis.

3. RESULTS

Number of collected questionnaires was 308, where the sample is only 307. This shows a response rate of 87.7% (88%) for the questionnaire.

The male employees in the sample accounts for 62.5% while female accounts for 37.5%. The majority of the respondents around 44.95% were between the age category of 27- 30 years and the minority of 4.89% were within the age category of 37- 40 years. 35.5% of the total sample were between the age category of 31- 33 years and only 14.6% of the total

sample were between 34- 36 years of age. The tenure with the current organization was also a significant demographic factor considered when analyzing the characteristics of the sample. The majority with 35.18% of the total sample had a tenure for more than 7 years with the current organization and a minority of 14.33% had a tenure in between 2- 3 years in the current organization. There were 24.76% of employees with a tenure within the current organization between 4- 5 years and 25.73% accounts for a tenure between 6- 7 years with the current organization. The marital status which is a crucial factor for employees in the IT industry is also considered here. 81.76% of the total employees were single and only 13% of the sample were married. There is also a minority of 5.21% of the total sample who were divorced. The divorced population was also considered as single in this analysis.

Once the demographic data was analyzed, the researcher gave more attention towards making sure that the data set is fully accurate. For this, the researcher has examined the data for any data entry errors, missing values, extreme value using box- plot diagram, normality of the sample using the skewness and kurtosis results, linearity using the Q – Q Plots and multicollinearity using the collinearity statistics. After ensuring the data set is accurate, the researcher performed the Cronbach's Alpha test in testing the reliability of the instruments.

Table 1: Reliability Test

Construct	Cronbach's Alpha
Career progression	0.891
Organizational culture	0.826
Flexible hours	0.764
Intention to stay	0.847

Source: Survey Results, 2020

All the variables in each construct shows a higher reliability which is more than 0.6.This claims that all the variables are valid for further analysis. Thus, the internal consistency reliability of the measures used in this study can be considered to be good with the Cronbach's Alpha value of 0.847. In order to find the impact of selected employee retention factors considered in this study on employees' intention to stay, the researcher first focused on finding the association/ relationship between the variables. For this, the researcher used the Pearson Correlation test. Since a specific direction of relationship is not given in the hypotheses, a two tailed test was performed using 5% of significance level (95% confidence). The Pearson's correlation coefficient value generally ranks from -1 (Strong negative relationship) to +1 (Strong positive relationship). The value indicates both the strength and the direction of the variables under consideration.

Table 2: Correlation of Key Variables

Construct	Correlation (r)	Sig. (p)
Career progression	0.804	0.000
Organizational culture	0.704	0.000
Flexible hours	0.630	0.000

Source: Survey Results, 2020

It is observable that all three constructs have positive coefficients and significant ($p<.05$). From the results, it is observable that the intention to stay in the current organization is, significantly positively correlated to Organizational Culture, Flexible Working Hours and Employee Career Progression.

Even though there is an obvious association between the dependent variable with the three independent variables, the degree of impact is the another objective of the study. In order to find the degree of impact between the variables and the model significance, a multiple regression analysis was performed.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.937[a]	.878	.877	.21570

a. Predictors: (Constant), CP, FW, OC

Source: Survey Results, 2020

The Coefficient of determination (R^2) is used to measure the usefulness/ accuracy of the model. This value always ranges in between 0% and

100%. In general, the higher the coefficient of determination, the better the model fits your data. This shows that the R squared value of 87.8% variance of employees' intention to stay explained by all the independent variables. Hence, more variance that is accounted for by the regression model, the closer the data points will fall to the fitted regression line.

Table 4:ANOVA of The Intention to Stay Model

Model	Sum of Squares	F	Sig.
Regression	101.849	729.687	.000[b]
Residual	14.097		

Source: Survey Results, 2020

The ANOVA table is there to show the overall significance of the model. The F value of 729.687 shows the overall significance of the model ($p < 0.05$).

Table 5: Coefficient Table

Construct	Beta (B)	Sig. (p)
Career progression	0.685	0.000
Organizational culture	0.029	0.384
Flexible hours	0.487	0.000

Source: Survey Results, 2020

The coefficients table (table no 5) helps to identify which among the three independent variables influence most and has the higher degree of impact on the dependent variable.

Accordingly, it is observable that employee career progression and flexible working hours had a high degree of impact on employees' intention to stay with (b=0.685, $p < 0.05$) and (b=0.487, $p < 0.05$) respectively. In contrary, the Organizational culture hada negligible impact on employees' intention to stay with (b=0.029, $p > 0.05$).

After performing the analytical tests through SPSS software it can be finally observed in the multiple regression analysis, on which variable has the highest impact on employees' intention to stay. The results showed that as the, employee career progression followed by flexible work hours and organizational culture respectively which is supported by diminishing B values for each variable.

Multiple Regression Line

$$IS = -1.351 + 0.590X1 + 0.728X2$$

The variables of Flexible working hours and Employee career progression are significant because both of their $p < 0.05$. The p value of Organizational culture is $p < 0.05$ & therefore; the variable is not significant. Therefore, Organizational culture has not been included in the regression equation.

However, test statistics in regression does not support the alternate hypothesis of organizational culture but it supports the alternative hypothesis of flexible working hours and career progression.

Table 6: Hypotheses Results

No.	Independent variable	Dependent variable	Hypo. Accepted?
H_1	Organizational Culture (OC)	Intention to stay	No
H_2	Career Progression (CP)	Intention to stay	Yes
H_3	Flexible Working Hours (FW)	Intention to stay	Yes

Source: Researcher Constructed

4. DISCUSSION

Based on the research's results, it can be observed that the Employee career progression & flexible working hours has a significant influence on employees' intention to stay. Similarly, the previous literature suggested that, a positive relationship between employee career advancement and employees' intention to stay was proved (Wijayawardhana, 2017). In 2019, Wijesiri stated that, when management wants to maintain a good level of employee retention, they should focus more on employee career advancements when formulating policies within the organization (Wijesiri, Sirirwardhana, Thilakarathna, Weerarathna, & Pathirana, 2019).

The availability of flexible working hours such as flextime and compressed work week seems to help employees experience greater job enrichment which, in turn, is associated with higher job satisfaction and higher intention to stay (McNall, Masuda, & Nicklin, 2009). The results of the present study also proved that organizational culture doesn't make an impact on employees' intention to stay.

Similarly, in the research of (Haggalla, Lakmini , & Jayatilake, 2017) have stated that the impact between Organizational Culture always doesn't necessarily need to be a positive impact. However, that should be further researched to make a final conclusion. Accordingly, it is observable that the present study has proved some facts which was also proved by other researchers in their research studies.

From data analysis and discussion, level of effect of each retention factor can be determined. Based on that, to retain employees, the firms can select the suitable strategies under limited resources. The intention to stay of an employee is significantly impacted by employee career progression and flexible working hours. Therefore, to increase employees' intention stay; the key is to increase positive factors and decrease negative factors impacting the employee career progression and Flexible working hours.

In order to increase the employee career progression, the researcher suggest to provide the required L & D programs in specific areas of soft skill trainings, technical trainings, conferences and certifications.

Similarly, the researcher also encouraged to provide mentoring and personal coaching sessions and finally to give enough space for the employees to think and be more innovative.

The researcher also recommends the employers to understand about each employee and their preference towards flex- hours. Here one main recommendation provided by the researcher was to allow the employees to effectively work from home and ensure about the quality of work and output rather than the place of work. In order to have a better culture which motivates the employees to retain long in the company, the researcher recommends having an open door policy where even the top local leadership is accessible. It is also recommended to have a uniform culture across all countries where the company operates. The employee onboarding programs must be improved to be more advanced and consistent. The employees must also be given value and recognition throughout their stay. Simple things like giving them the required credit when they achieve something and encouraging words during a failure would go a long way for employees to love their current employee and stay longer with a positive attitude.

5. CONCLUSION

The main target of conducting this research was to identify how some selected employee retention factors effect on employees' intention to stay and to what extent each dimension impact on employees' intention to stay in the IT industry in the western province of Sri Lanka. The study concluded that Employee Career Growth have a very strong relationship with Employees' intention to stay while Organizational culture and Flexible working hours had strong and moderate relationships respectively. This proof fulfilled the first objective of the study.

When considering the second objective of the study regarding the degree of impact of retention factors on employees' intention to stay; the employee career progression, flexible working hours and organizational culture can be listed in sequence. The results of this study helps to strengthen the fact that there is an association and a significant impact of employee career progression, flexible working hours and organizational culture on employees' intention to stay. This theoretically contributes to the existing knowledge base in the similar area of study. The practical contribution of this study can be stated as the fact that the researcher mainly focused on a different context for the study. The researcher specifically focused on some selected IT companies in Colombo suburbs, Sri Lanka when conducting the research.

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Factors Affecting Undergraduate Entrepreneurial Intention: The Effect of Entrepreneurial Education, Previous Experience, and Personal Skills

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Abstract

It is generally accepted that entrepreneurship can be taught and that learning leads to new venture creation. However, some argue that entrepreneurship cannot be taught. With this in mind, this study examined the relationship of entrepreneurial education, personal skills, and previous experience to examine which factor plays the most effective role in making an impact on the intention to become an entrepreneur. The study sample consisted of 218 management undergraduates from three leading universities in Sri Lanka and data were collected through the administration of a formal questionnaire. Generally, the overall results of the study indicate that the best way to make an impact on undergraduates is to guide them through practical entrepreneurial experience rather than focusing more on formal theoretical knowledge.

Therefore, this study suggests academics, to integrate the more practical experience into the entrepreneurship course curriculums and this will reshape the future development of the entrepreneurial education field.

Keywords-: Entrepreneurial Education, Entrepreneurial Intention, Personal Skills, Previous Experience

1. INTRODUCTION

Entrepreneurs play a key role in any country and are positively affected by the new and innovative business start-ups (Kiss, Danis & Cavusgil, 2012). Defining the term 'entrepreneur' and setting up the boundaries of the field of entrepreneurship was a problem that exists and continues to remain (Cunningham & Lischeron, 1991; Bruyat & Julien, 2001). However, entrepreneurs can be identified as people who have the right set of skills and great initiative that necessary to

take viable new ideas to market; and to make the right decisions that lead to profitability (Arunachalam *et al.*, 2018). In the past two decades, it has become more and more evident that entrepreneurs have a strong influence on the widening of employment opportunities, productivity, and the level of innovation in an economy (Audretsch, 1998). Especially in Sri Lanka, as a developing nation; we need more entrepreneurs who are competent to perceive new opportunities and convert them into viable business ventures. Therefore, it is better to find ways to create and develop new entrepreneurs by strengthening their vision.

In this study, the focus has been placed on the role that entrepreneurial education plays within entrepreneurship and how the other constructs behave when deciding to become an entrepreneur. On the contrary, there are a lot of factors that affect the decision of becoming an entrepreneur (Talebi, Nouri & Kafeshani, 2014; Wajeeh Elali Badriah Al-Yacoub, 2016). Among them, entrepreneurial education, personal skills, and previous experience are considered as the main constructs of the study.

For instance, social participation of humans begins in early childhood; where children first engaged with their parents; and this engagement contributes to learning from experience. (Brown, Collins & Duguid, 1989; Rogoff, 1990; Lent &

Brown, 1996). Likewise, people engage with surrounding communities and gain the required knowledge, and utilize them to build sustainable business ventures. And this will also contribute to the development of personal skills as well. In this regard, the researcher has identified personal skills and previous experience as forms of social participation (Liñán, 2008; Politis, 2008). Moreover, according to Kolb (2015), learning from experience or rather 'Experiential learning' is identified as an effective way of learning in any setting.

However, the literature on experiential learning of entrepreneurs is not sufficient enough and needs to develop more insights on this to identify the relationship between these two elements (Wang & Chugh, 2014; Nenzhelele, Moraka & More, 2016). And even experiential learning can be used as a tool to encourage entrepreneurship education as well (Dhliwayo, 2008).

When compared to previous experience and personal skills; entrepreneurship education is a formal way of learning that delivering people with knowledge, skills, and motivation to stimulate entrepreneurial intention and success (Cho, 1998). Though scholars Martin, Mcnally & Kay (2013) affirm that the existing pieces of evidence are not sufficient enough to express the importance of entrepreneurship education in creating better

entrepreneurs. The author further discussed that the existing literature in the field indicated both the negative and positive impact of entrepreneurial education on intention.

Problem

In the given context, the unemployment level around the globe is rising to a peak. According to the global Employment Trends for Youth 2020 (GET youth 2020), the unemployment level (Age between 15-24) is rising rapidly when compared to the 2018 figures. In the Asian region, they have estimated around 14% youth unemployment level, which is exceeding the global unemployment level of 13.7%. On the other hand, young people who are currently employed face greater risk due to the implementation of new technologies and automation of job roles. However, those who have higher education are less likely to lose their jobs. But with the current trend, they have also faced the same issue due to the increasing number of youths with higher-level education which threatens to outpace the demand for graduate labor and this will push down the graduate wages as well.

Furthermore, globalization, the world financial crisis, and the adaption of new technologies makes economies more vulnerable and create limitations. With these limitations' businesses are unable to provide or create new job opportunities for the youth, to fulfill the current demand, and to provide support for economic growth. Thus, in this scenario, Entrepreneurship can be proved as a solution to adapt to the changing economy and to solve other economic problems such as unemployment among youths.

Therefore, the researcher has identified the importance of producing more young entrepreneurs for the market, Hence, it will create more opportunities in the market place to boost the economic activities and to reduce the unemployment level of youths in the country. Therefore, the researcher is interested in the question of "How to create entrepreneurs?", "what are the facts that influence a person to become an entrepreneur?". By reviewing past literature on entrepreneurship, the researcher has identified some factors that influence a person to become an entrepreneur. Some become entrepreneurs through cognitive learning while others become entrepreneurs through social participation.

Therefore, the paper is grounded primarily in the debate surrounding the question of, do undergraduates find entrepreneurial education as resourceful or do the previous experience and personal skills support when becoming an entrepreneur. Therefore, this study will be carried out to discover and understand which factor plays the most effective role in

making an impact on the intention to become an entrepreneur.

The study intends to achieve the following objectives; (a) to identify the impact of entrepreneurial learning from formal education on entrepreneurial intention. (b) to identify the impact of personal skills on entrepreneurial intention. (c) to identify the impact of previous experience on entrepreneurial intention.

1.1 Literature Review
1.1.1. Entrepreneurship

Creating new business ventures is important for job creation and new market creation and it positively affects economic development as well (Nishantha, 2009). Most importantly, there is no universal definition of entrepreneurship (Cunningham & Lischeron, 1991; Bruyat & Julien, 2001; Iversen, Jørgensen & Malchow-Møller, 2008). However, scholars' view of entrepreneurship has changed significantly since Schumpeter defined the term in 1934 for the first time. According to Drucker (1985), entrepreneurship is an "…innovative act, which includes endowing existing resources for new wealth-producing capacity." In the view of Drucker (1985), entrepreneurship is the creation of a new organization, regardless of its ability to sustain itself, let alone make a profit.

Though the definitions presented by scholars seem to be somewhat

simplistic, it describes the nature of entrepreneurial activities with risk-taking and the bearing of uncertainty by the individual (Swoboda, 1983). Gartner (1985) simply outlined the term, entrepreneurship as the "creation of a new organization." However, according to Carrier (1996), entrepreneurship is also can be considered as a primary source of innovation and it may involve the development of new visions and business methods for the creation and establishment of new organizations.

1.1.2. Entrepreneur

In the early 1700′s, The French economist, Richard Cantillon, defined an entrepreneur, as one who assumes risks by buy at a certain price and selling at uncertain prices, the difference between that is the profit or loss bear by the individual (Barreto, 1989; Casson, 1982; Bordo & Murphy, 1989). Further, Morrison (1999) identified and list down a set of talents that an entrepreneur has posses; according to the researcher, an entrepreneur; is one who: intelligent and analytical, effective risk manager and a networker, possesses a strong set of moral, social, and business ethics exhibits a basic trader's instinct and dedicated to life-long learning in many forms. The talents mentioned here are vital for becoming successful entrepreneurs in the knowledge era. Other than the talents,

Lee and Peterson (2000) highlighted the significance of a national culture that supports entrepreneurial activities. According to the researcher, even those individuals who are inspired by elements such as financial rewards, achievement, social, career, and individual fulfillment need a supportive culture. Watson, Hogarth-Scott, and Wilson (1998) and Morrison (1999) studies also claim that entrepreneurial spirit needs a suitable social and cultural environment to initiate motives for venture creation and aspiration for excellence in various academic areas to create a successful business venture.

1.1.3. Entrepreneur and Work

Cognition and motivation approaches can be used when studying the entrepreneur behavior (Shaver & Scott, 1991). The entrepreneurship intention approach is the latest approach used by several researchers to understand the entrepreneurial process and behavior and it provides strong statistical support for understanding the behavior of an entrepreneur (Mull, 2012; Ozaralli & Rivenburgh, 2016). Entrepreneurial intention is vital for potential entrepreneurs because, simply the intentions demonstrate the future behavior of an entrepreneur and why they are intending to start their venture before the opportunity search (Mcstay, 2008; Ajzen, 1991; Krueger, Reilly & Carsrud, 2000). Becoming

an entrepreneur is a summation of entrepreneurship and the entrepreneurship process (Maharani, 2014). Most of the researchers have studied the entrepreneur as an individual party (Bruyat & Julien, 2001).

1.1.4. Entrepreneurship Education

Some different definitions and theories exist to define the term 'learning'. Therefore, it believes that there is no universal definition to define the term (West, 2018). In general, there are five main learning theories (social constructivism, social cognitive, cognitivism, humanism, and behaviorism), and scholars utilized those theories to identify how to incorporate and apply them into entrepreneurship learning (Toutain and Byrne, 2012). However, when it comes to discussing the concept of 'entrepreneurial' learning this resonates well with the overall discussion of several studies that talk about the learning modes of individuals (Bandura, 1986; Young & Sexton, 1997; Deakins & Freel, 1998).

According to many scholars who have studied the area of the "impact of Entrepreneurship Education" highlights the importance of Entrepreneurship Education (Gorman, Hanlon & King, 1997; Lee, Chang & Lim, 2005; Fayolle, Gailly & Lassas-Clerc, 2006). The majority of the

scholars' studies in the area of Entrepreneurship Education suggest that Entrepreneurship is a teachable discipline (Lange *et al.*, 2014; Popescu, 2016). However, the entrepreneurship education programs should adjust accordingly based on target clientele and evaluations because students' attitudes towards entrepreneurship can be changed over time (Bechared and Toulouse 1998). According to Mcstay (2008), the most suitable way of evaluating entrepreneurship courses is to evaluate the attitude changes of the participants about entrepreneurship and the impact of these on their entrepreneurial intentions.

Ducker (1985) also states that entrepreneurship is a behavioral pattern and entrepreneurship courses sharpen the individuals' attitudes and they learn how to behave entrepreneurially. Further studies about entrepreneurship education mainly focus on enterprise education and consider course content, teaching methods, entrepreneurial learning, and assessment (Greene & Rice, 2007). However, a broad range of entrepreneurship training programs are offered worldwide and given the diversity of such programs, measurement and comparison of their effectiveness are problematic; therefore, researchers emphasize the need to evaluate the effectiveness of entrepreneurship programs (Walter & Block, 2016; Porter & McKibbin, 1988). Garavan and O'Cinneide

(1994) also present an analysis of six European entrepreneurship programs concluding with a call for an increased evaluation of the effectiveness of programs worldwide. Bechard and Toulouse (1998) suggest the goal of entrepreneurship education training programs should be specific to the target client and in turn, evaluation should be adjusted accordingly.

1.1.5. Previous Experience

During this research, the researcher would be following the relationship between the practical entrepreneurial experiences in relating to working as an entrepreneur or engaged in someone's venture. According to Mcstay (2008), practical entrepreneurial experience means prior knowledge with the identification of a greater number of more innovative entrepreneurial opportunities. Prior knowledge is defined as an individual's distinctive information about a specific subject matter and may be the result of previously attained work experience or education (Hailikari, Katajavuori & Lindblom-Ylanne, 2008). Adapting Social Cognitive Theory (Bandura, 1986) from a social learning perspective, occupational role models and previous experience are important environmental factors in an individual's career selection process. It is a function of knowledge and it is reasonable to assume that participation in entrepreneurship

education and previous entrepreneurial experience would increase an individual's entrepreneurial knowledge. Previous relevant entrepreneurial experience and knowledge may be likely candidates to engage in Entrepreneurial behavior at some stage in their life cycle.

Reitan (1997) also found that Practical business experience strongly influenced the intention to become an entrepreneur. Scherer *et al.* (1989) stated that different learning histories and experiences may distinguish an entrepreneur from a non-entrepreneur.

1.1.6. Intention to Start a Business

This study is mainly focused on the study of the self-employment intention of Sri Lankan undergraduates. The entrepreneurship education programs which are offer for university undergraduates can positively impact their entrepreneurial intention and make a positive attitude about entrepreneurship. Practical studies show that entrepreneurship education is an important internal factor in the entrepreneurial intention model as well (Krueger, 1993).

The purpose of studying intention is to predict the behavior of a particular person or group and cognitive psychologists have studied this area for many years, in which writers including Assagioli, 1973; James, 1950; Lewin, 1935; Rotter, 1966.

According to Krueger and Brazeal (1994), Entrepreneurial intention can be defined as a person's intention to a particular entrepreneurial behavior. Crant (1996) described self-employment intention as an individual's wish to run their own business. Lee and Wong (2004) stated that the first step of the new organizational emergence is self-employment intention. Furthermore, Bird (1988) Mentioned that new ventures consist of an entrepreneur's intention and subsequent actions. In his model thinking style, personal history, ability, and environmental states are the intentional actions of an entrepreneur.

Finally, the hypotheses of the study can be derived as follows.

Hypotheses

H1: There is a significant impact of Formal Entrepreneurial Education on Intention for Entrepreneurship.

H2: There is a significant impact of Personal Skills on Intention for Entrepreneurship.

H3: There is a significant impact of Previous Entrepreneurial Experience on Intention for Entrepreneurship.

2. METHODS

As mentioned above, the goal of this research is to study and deepen the knowledge of the relationships between entrepreneurial learning and the intention of entrepreneurship. To fulfill the objective of the research,

the researcher did collect and analyze the data using quantitative approaches. Hence the research design would be a survey study.

The questionnaire was prepared including both open and closed (mixed Model) questions (used five Likert scale method) which are relevant to measure the objectives of the research. And also, the questionnaire was designed and presented with simple wordings and this will make it easy to understand for the respondents. A convenient sampling method was used to gather data from the sample. The sample will consist of 218 undergraduates in the relevant stream who are currently reading for their degree in three universities. The rationale behind the choice of the three universities was to obtain samples from the universities in Western Province. A descriptive analysis is conducted to examine the nature of the sample and to obtain summarized statistics. And the correlation analysis was conducted to detect the relationships between the independent variables and the dependent variable. Further, a multiple regression analysis was carried out to analyze the impact of entrepreneurial education, personal skills, and previous experience on Entrepreneurial Intention. Both the analysis were conducted utilizing SPSS Software (Statistical Package for Social Science).

3. RESULTS

As per the respondent's statistics, from 218 respondents – there were almost equal proportions of male and female students, with a slight majority of female students of 52%. All the respondents are from three state universities, Jayawardhanapura, Colombo, and Kelaniya and all of them are studying entrepreneurship. Demographic variables will be useful to identify their behaviour when interpreting the collected data.

Before proceeding further into the analysis, this research conducted the following test in accordance to test the reliability of the questions. The reliability of the instruments used in this research was tested using SPSS. All values in the inter-item correlation matrices were positive values, indicating that the items are measuring the same underlying characteristic and confirming the internal consistency of the scales. Cronbach alphas are presented in **Table 1** below and suggest a strong relationship amongst the items on each scale for each variable.

Table 1: Reliability analysis

Construct	Cronbach's Alpha
Formal Entrepreneurship Education	.721
Personal Skills	.824
Personal Experience	.850

Entrepreneurial Intention	.789

Source: Generated by Author using SPSS

According to the test, results relating to formal entrepreneurship education, personal skills, personal experience, and entrepreneurial intention are .721, .824, .850, and .789, respectively. According to the rule of thumb, the above results are in a good range (George & Mallery, 2003).

Thereafter, the validity of the data set measured using KMO and Bartlett's Test (**Table 2**). And results of the test indicate that factor analysis may be useful with provided data. The Kaiser-Meyer-Olkin measure of sampling adequacy is > 0.50 and Bartlett's Test Sphericity significance level is < 0.05.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.651
Bartlett's Test of Sphericity	3009.088
	190
	.000

Source: Generated by Author using SPSS.

Before testing the hypotheses, the Pearson correlation (Table 3) test was conducted to identify the relationship between IVs & DV.

Table 3: correlation

		Intention for Entrepreneurship
Formal Entrepreneurship Education	Pearson Correlation Sig. (2-tailed) N	.507** .000 218
Personal Skills	Pearson Correlation Sig. (2-tailed) N	.435** .000 218
Previous Entrepreneurial Experience	Pearson Correlation Sig. (2-tailed) N	.632** .000 218

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Generated by Author using SPSS

According to the results derived from the test, the Pearson Correlation values between IVs and DV are positive. There is a moderate positive relationship between formal entrepreneurship education, personal skills, and intention for entrepreneurship. And also results indicate, a strong positive relationship between previous entrepreneurial experience and intention for entrepreneurship.

Table 4: Model summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.676[a]	.457	.449	.47122	1.363

a.Predictors: (Constant), Previous Entrepreneurial Experience, Personal Skills, Formal Entrepreneurship Education
b.Dependent Variable: Intention for Entrepreneurship
Source: Generated by Author using SPSS

Table 5: ANOVA table in the regression analysis

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	39.954	3	13.318	59.98	.000[b]
Residual	47.518	214	.222		
Total	87.472	217			

a.Dependent Variable: Intention for Entrepreneurship
b.Predictors: (Constant), Previous Entrepreneurial Experience, Personal Skills, Formal Entrepreneurship Education
Source: Generated by Author using SPSS

Table 6: Coefficient table for the regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	SD	Beta		
(Constant)	.635	.145		4.397	.000
FE	.121	.073	.111	1.648	.101

PS	.146	.041	.207	3.591	.000
PE	.393	.051	.491	7.720	.000

a. Dependent Variable: Intention for Entrepreneurship
Source: Generated by Author using SPSS

The model summary (Table 4) indicates the Multiple Linear Regression results of the analysis. It depicts the impact of the independent variables on the dependent variable. As per the results, the R Square value indicates a high level (45.7%) of model fit and the Adjusted R square value confirmed 44.9% of the impact. And the overall model fit is significant

under the 0.05 level of significance level. Finally, it can conclude that the

personal skills and previous entrepreneurial experience are statistically significant when predicting the intention for entrepreneurship (DV) of the study. However, in this case, formal entrepreneurial education is not significant under the 0.05 level of significance.

Hypothesis Testing

Results derived from the data analysis can be illustrated as follows.

Table 7: Results of hypothesis testing

	Hypothesis	Result
H_1	There is a significant impact of Formal Entrepreneurial Education on Intention for Entrepreneurship.	Rejected
H_2	There is a significant impact of Personal Skills on Intention for Entrepreneurship.	Accepted
H_3	There is a significant impact of Previous Entrepreneurial Experience on Intention for Entrepreneurship.	Accepted

4. DISCUSSION

This study is subject to some limitations. The sample is limited to three universities in the western province of Sri Lanka and university undergraduates who study entrepreneurship as a course unit. However, the author believes that the limitations can be eliminated with

further studies. Meanwhile, the results of the study revealed that the impact of entrepreneurship education is less or rather not significant when

compared to previous entrepreneurial experience and personal skills on the entrepreneurial intention of the undergraduates. Past literature on entrepreneurship teaching and

learning methods commended the results derived from the current study. Authors, Davies and Gibb (1991) explained how critical the adoption of traditional education methods, that mainly focus on theoretical approaches. According to the authors, those methods are inappropriate in the teaching of entrepreneurship. Young (1997) affirms this view and suggests that the practical skills and experience used by entrepreneurs cannot be gained or acquired through these traditional teaching and learning methods. Further Gibb (1987) suggests a flexible and active experience-based learning approach to teach entrepreneurship. According to the findings of Timmons and Stevenson (1985), the best way to learn entrepreneurship is to combine experience with formal educational activities. The authors further discuss that entrepreneurship is a field that can be taught but there are some critical skills that entrepreneurs need to learn. However, to learn those critical skills, such as judgment, patience, responsibilities, and handling people; entrepreneurs need to engage with the real world and gained experience from there. Moreover, the research findings of Kirby (2004) revealed that all the entrepreneurial characteristics can be developed within a student, but not using the traditional teaching methods and traditional standard functional competences that are used in business schools.

In the current context, entrepreneurship educational programs merely produce entrepreneurship graduates. Because, teaching undergraduates how to write a good business plan is not enough to become an entrepreneur (Rauch, Potishuk & Kratzer, 2018). Moreover, the curricula of these entrepreneurship programs follow traditional theoretical teaching methods. Higher education institutes, such as public and private universities, have an important role in the supply of quality and well-educated graduates as entrepreneurs (Rae, 2004). To affirm this argument; there is a general agreement between researchers that traditional teaching methods in entrepreneurship are not sufficient enough to develop quality entrepreneurs to run and create business ventures with high complexities (Higgins, Smith & Mirza, 2013).

Because in the era of globalization, with rapidly changing technology, markets, and economies; entrepreneurs need to deal with a high level of uncertainties along with risks (Wang, 2019). Therefore, this study suggests educational institutions and academics to explore and identify the following areas before they deliver the program content to the student. How does (a) the type of teaching method, (b) the background of lecturers, (c) the entrepreneurial intention of lecturers, (d) and the contents of entrepreneurship

education programs affect students' intentions? (Theoretical and practical knowledge).

Authors Higgins and Elliott (2011) presented experiential methods of learning as a new era of entrepreneurial education. Where undergraduates can learn with more practical related scenarios rather than based on traditional theoretical methods of learning. Even authors, Neck and Greene (2011) suggest, the importance of applying theoretical knowledge gained by students to real-world scenarios and learn from the experience. Thereby, undergraduates will get an opportunity to put the learned theories into practice and actively engaged in business opportunity exploitation and understand the real challenges of running a business venture (Sarasvathy, 2001).

Therewith, authors tend to highlight the importance of teaching practical entrepreneurship to undergraduates (Peters *et al.*, 2014; Nenzhelele, Moraka & More, 2016). This argument can be equated to the teaching and learning methods of doctors. Simply doctors cannot proceed with surgeries without having practical experience. The results of the study may have valuable implications for policymakers, academics, and educators. The author of this study would like to suggest academics and educators to compile an extensive curriculum for entrepreneurship

education programs by integrating modules to develop undergraduates' experiences in practical businesses and modules to develop their skills and also, there is a need for more innovative and radical approaches to teach and learn entrepreneurship than appears to have been evident to date.

5. CONCLUSION

This article intended to explore the effect of entrepreneurship education, previous experience, and personal skills on the entrepreneurship intention of Sri Lankan university undergraduates. The results of the study found that only two variables of the model were significant. The first factor is previous experience and the second factor is the personal skills of undergraduates. Moreover, this study was limited to undergraduate studies in three major universities in Sri Lanka. The number of students who participated in this study was also limited to 218 students. Therefore, the author recommends conducting more research on this, since, it is not possible to ignore the contribution of formal entrepreneurial education programs in creating quality entrepreneurs. Finally, future research should focus more on to evaluate progress in formal entrepreneurship education and to bridge the knowledge gap of how other aspects that affect entrepreneurial intention interacts with formal entrepreneurial education.

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The Impact of Training and Development on Employee Performance of Apparel Industry in Sri Lanka

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Abstract

The main objective of the study is to identify how training and development affects operational level employee performance in the context of the apparel industry in Sri Lanka. The researchers carefully chosen three leading apparel sector companies in Sri Lanka for this study. The reason for selecting this research topic is that it was identified that apparel companies were facing issues where employees make errors and delays and their performance has significantly reduced. It was identified that there are mistakes and delays from machine operators' side which affects target achievement, thereby shipment delays to the end customer. Over the last year, there was an error rate of 5 percent which causes a massive waste of materials and fabric. Key performance indicator achievement fell by 10 percent which hit revenue adversely and this has led to customers delaying payments and moving on to competitors who are more punctual. This demonstrates the importance of training and development which will reduce errors, mistakes and delays. The independent variables considered were orientation training, coaching, job rotation, mentoring and continuous job training while the dependent variable was employee performance in the apparel industry. A structured questionnaire was used to gather data which was distributed to 210 respondents who were selected on convenience sampling. The findings denoted that there is a strong positive impact of all independent variables on the dependent variable.

Keywords-: Training and Development, Employee Performance, Apparel industry

1. INTRODUCTION

1.1   Background of the Study

At present, every organization is operating in rapidly changing and very competitive environment as per Ardley & Mcintosh (2019). They further elaborated that every company may have to face global, economics and technological changes when operating their business activities. Hence, organizations have to update and enhance the knowledge, skills, attitudes and capabilities of employees' in order to

achieve organizational objectives. Sultana (2012) demonstrated that the purpose of human resource management is to enhance employee contribution to the organization and develop the employees. In this context, training and development plays a vital role. Human capabilities are changing day by day, therefore, if companies fail to give training to their employees in order to upgrade skills, knowledge and attitudes they may leave the organization (Aidah, 2013). As per Charles (2009), apparel technology keeps getting updated frequently. Therefore, training and development is a crucial aspect in enhancing skills and competencies of employees, thereby increasing performance of the employees' as mentioned by Juliana (2004).

It was identified that lack employee performance is a severe issue in the apparel sector in Sri Lanka as organizations lose a considerable amount of revenue when employees do not perform well. Three leading apparel companies in Kurunegala district were selected for this research and it was identified that there are mistakes and delays from machine operators' side which affect target achievement, thereby shipment delays to the end customer. Over the last year, there was an error rate of 5 percent which causes a massive waste of materials and fabric (X, personal communication, 05 February 2020). This has led to customers delaying payments and moving on to competitors who are more punctual. It demonstrates the importance of training and development which will reduce errors, mistakes and delays. Thus, identifying the ways and means

to increase employee performance is vital which will be analyzed through literature and then be researched in the context of the apparel industry in Sri Lanka.

Although various researches have been carried out to identify the impact of training and development on employee performance, factors such as orientation training, coaching, job rotation and mentoring have not been focused. Most researchers have focused on self-efficacy, communication, support, working conditions and quality of trainers which are not factors directly under the umbrella of training and development and this was identified as a research gap in this study.

1.2   Research Objective

The objective of this study is,

- To identify how training and development affects employee performance in the context of the apparel industry in Sri Lanka.

Further, it was cascaded into specific objectives as follows;

- To investigate the impact of orientation training, coaching, job rotation, mentoring and continuous job training on employee performance.

The study is limited to the impact of training and development on the job performance of employees in the apparel industry in Sri Lanka. Furthermore, the study was limited to selected employees of three major apparel companies as a focus point

which are Company A, B and C. The study carried out was quantitative which covered 10 percent of employees per organization, making the total sample 210. The selected factors for analysis of impact of training and development on the job performance of employees are orientation training, coaching, job rotation, mentoring and continuous job training.

Employee Performance

Juliana (2004) defined performance as the accomplishments or the outcomes produced by the behavior we value. Raymond (2010) mentioned that performance can be measured and analyzed by human resource development professionals to determine whether the organizational objectives are being met. Abdul (2011) pointed out that once performance is measured, it could be compared against the planned level of performance in order to identify gaps.

1.3   Training

Armstrong (2006) demarcated training as a systematic development of the knowledge, skills and attitudes required by an individual to perform adequately a given task or job. According to the Flipp (1984), "training is the act of increasing knowledge and skills of an employee for doing a particular job". The term 'training' indicates the process involved in improving the aptitudes, skills and abilities of the employees to perform specific jobs. Training helps in updating old talents and developing new ones. It is vivid that

training will enhance the skill sets of employees. Hence, it is evident that training and development plays a vital role in the successful functioning of the organization. Carrying out training and development will facilitate in addressing gaps in performance which will in turn assist in achieving the KPIs. Tahir (2014) identified that there is a positive relationship between training and development and employee performance. As per him, one major reason for employees to underperform is when they are not aware of what they have to do. It can be mentioned that when employees are clear as to what is expected of them and possess the skills and competencies to do so, job performance will consequently increase.

1.4   Employee Development

Employee Development is one of the most important functions of human resource management as per Learner (1986). Employee development means to develop the abilities of an individual employee and organization as a whole as per them. Employee development consists of individual or employee and overall growth of the employee (Armstrong, 2006). This means when employees of the organization develop, the organization, organization would be more flourished and the productivity would increase (Elena, 2000). Consequently, there is a direct relationship between employee development and employee performance. Furthermore, when employees are more developed, they would be more satisfied with the job,

more committed towards the job and as a result performance would be increased (Sims, 2006).

Employee development activities are very important for the employees, as the activities are performed, it indicates that organization cares about their employees and wants them to develop (Elena, 2000). Many of the organizations are investing in employee development. When organizations are contributing towards the employee development activities, the employees work hard and utilize their full skills and efforts to achieve the goals of the organizations. There are many schools of thoughts. One school of thought says that employee development focus on areas such as self-development and self-directed learning. This concept indicates that employee development must be recognized by the employees who want to learn or who are willing to learn. When employees are willing to learn, they show their interest in the developmental activities, as a result they are more satisfied with the job which will lead to increase in employee performance (Champathes, 2006). Employee development also depends upon the individual employee, how much curiosity to learn, no matter how much expertise does a person have if person or employee is not willing to develop, no matter how much resources you provide employee would not developed. So employee development is also a personal responsibility of the employees. Employees at all levels are involved in the developmental activities whether the upper level employees, middle or lower level employees (Champathes, 2006).

1.5 Independent Variables

Orientation Training

Orientation means providing new employees with basic information about the employer (Tuzun, 2005). As per Sims (1998), orientation and training programs are important components in the processes of developing a committed and flexible high potential workforce and socializing new employees. In addition, these programs can save employers' money, providing big returns to an organization, because an organization that invests money to train its employees results in both the employees and the organization enjoying the dividends (Sims, 1998). Unfortunately, orientation and training programs are often overlooked (Albercht et al., 2015). A recent U.S. study, for example, found that 57 percent of employers reported that although employees' skill requirements had increased over a three year period, only 20 percent of employees were fully proficient in their jobs. According to Andrew (2012), orientation programs not only improve the rate at which employees are able to perform their jobs but also help employees satisfy their personal desires to feel they are part of the organization's social fabric. He further states that the HR department generally orients newcomers to broad organizational issues and fringe benefits. Supervisors complete the orientation process by introducing new employees to coworkers and others involved in the job. A buddy or mentor may be assigned to continue the process.

Coaching

Coaching is an important activity for the employee development. Coaching is not formal. It involves treating employees as a personal partner in achieving both personal and organizational goals. Hence, we can solve personal problems of the employees by providing coaching (Agarwal, 2006). When problems are resolved, this lead to increase in organizational performance as employees would be able to achieve organizational goals. Azar & Shafighi (2013) mentioned that coaching is one of the most critical skills to be mastered by today's entrepreneur. Today's environment has created more pressure to do more with less. The key to reducing pressure is to make the most of the employees. Coaching is the most effective way of developing employees. Improved employee performance leads to increased productivity and bottom line results. Employees experience increased self-esteem and job satisfaction (Azar & Shafighi, 2013).

Job Rotation

According to Bukovinsky (2013), job rotation is a technique used by some employers to rotate their employees' assigned jobs throughout their employment. Research indicates that job rotation enables cost savings as well as increase performance of employees' as per him. By rotation of jobs, the employees feel stress free as they rotated to a new job which helps them to learn something new, and motives them to give performance. In the apparel industry by rotating employees, the employees workload

reduced and they did not get bored by their same job, which ultimately motivates them and increase their performance (Carvin, 2011).

The employees take interest in new jobs as their jobs rotates as per time schedule (Bukovinsky, 2013). As the job rotates the employee got to a new position whether it is on the same rank but the nature of the job changes which creates his/her interest towards new job. According to Carvin (2011), this leads to increase in employees' performance. The self- promoting system in job rotating systems creates satisfaction for employees and give them greater exposure to all aspects of the job. Ideally, this would produce better products as managers or other employees gain knowledge on consumer needs while marketing people engaged in the banking services and can give their point of view as per Carvin (2011).

Mentoring

As per Choudhary et al. (2012), mentorship is a relationship in which a more experienced or more knowledgeable person helps to guide a less experienced or less knowledgeable person. They further mentioned that the mentor may be older or younger than the person being mentored, but they must have a certain area of expertise. Mentoring offers numerous benefits to both mentor and mentee. It serves to broaden staff insight into the business and build stronger relationships as per Brick (2012). Mentoring contributes to the success of the mentee by improving performance, increasing confidence, and addressing strengths and weaknesses (Brick, 2012). A

mentorship can help a mentee learn and develop faster by encouraging an exchange of information that does not always exist naturally as stated by Albercht et al. (2015). Mentoring programs let employees know that the company values them and has an interest in their personal development, leading to increased productivity and reduction in turnover as per them.

Continuous Job Training

According to Densten and Sarros (2012), companies can reap the rewards of providing training for their employees because well-trained workers help increase productivity and profits. According to Densten and Sarros (2012), a continuous training program helps employees hone their knowledge and skills and provides them with a clear picture of their strengths and weaknesses. From an organizational perspective, it also minimizes weak points and saves your business time and money by avoiding repeat mistakes. Andrew & Sofian (2012) stated that employees who have access to continuous training and mentorship programs are more likely to feel valued, engaged, and loyal to your business. They feel accomplished when tackling new challenges and are eager to learn more and advance their careers. Continuous training benefits employees and employers, providing them with the confidence, skills, and creativity needed to do superb work today, tomorrow, and many years down the line (Albercht *et al*., 2015).

After studying literature, it was identified that although various researches have been carried out to identify the impact of training and development on employee performance, factors such as orientation training, coaching, job rotation and mentoring have not been focused adequately. Most researchers have focused on self-efficacy, communication, support, working conditions and quality of trainers which are not factors directly under the umbrella of training and development. Furthermore, as per the data collected, the problem of lack of employee performance still persists. Productivity of organizations are deteriorating despite technological upgrades. The management takes efforts to address this through various strategies. Consequently, this research study was conducted to address this gap.
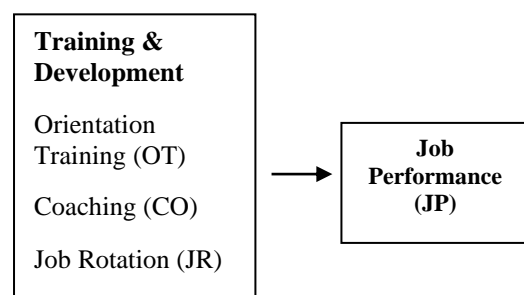
1.6 Conceptual Framework

Figure 1: Conceptual Framework
Author Developed, 2020

1.7 Hypotheses

H1: Orientation training has a significant impact on Employee Performance in the apparel industry.
H2: Coaching has a significant impact on Employee Performance in the apparel industry.

H3: Job rotation has a significant impact on Employee Performance in the apparel industry.

H4: Mentoring has a significant impact on Employee Performance in the apparel industry.

H5: Continuous job training has a significant impact on Employee Performance in the apparel industry.

2. METHODS

For this research a deductive approach was deemed suitable where it initiates with an in-depth review of literature to identify gaps in literature for which hypothesis will be formulated and tested. This will be a quantitative study where attention will be paid on collecting numerical data.

Under this research, the sample was 210 employees working in Company A, B and C. The study carried out was covered 10 percent employees per organization and making the total sample 210. The table 1 presents how these employees were selected from each organization to form the sample. The sampling technique is convenience sampling which is a non-probability sampling technique where the respondents were selected based on easy accessibility.

Table 1: Total Sample

Company	Sample
Company A	92
Company B	75
Company C	43
Total Sample	210

Source: Survey Data, 2020

This is a quantitative research where attention will be on numerical figures. A survey strategy was selected as it facilitates gathering a massive amount of data. A questionnaire was used collecting data which comprises of five point likert scale questions.

Both primary and secondary data were used in this study. In this research a structured questionnaire was used to collect primary data under factors such as orientation training, coaching, job rotation, mentoring and continuous job training, in order to identify their impact on job performance. Several secondary sources such as journal articles, research papers, reviews, newspapers, magazines, blogs and books was used. Accredited sources such as Emerald Insight, Elsevier, Sage, JSTOR, Springer were used.

SPSS 22 was used to carry out the calculations and analyses. It was used to generate graphs, charts and tables. Descriptive analysis, correlation analysis and regression analysis were employed for further analysis.

3. RESULTS

3.1 Reliability Testing

The reliability analysis results are tabulated below where the values of Cronbach's alpha are greater than 0.7 as clearly presented in the Table 2. Hence, it could be realized from this that the data is reliable and suitable to continue with hypothesis test and descriptive analysis. The results indicated below were obtained from SPSS.

Table 2: Reliability Analysis

Variables	Cronbach's Alpha	Decision Rule
Orientation training	0.734	0.734 > 0.7
Coaching	0.874	0.874 > 0.7
Job rotation	0.912	0.912 > 0.7
Mentoring	0.745	0.745 > 0.7
Continuous job training	0.820	0.820 > 0.7

Source: Survey Data, 2020

3.2 Normality Testing

A normality test assist in understanding the Central tendency and the Dispersion of the Test variables which was carried out for this research. The Skewness and Kurtosis values were between +2 and -2. Based on which it could be mentioned that the data is normally distributed.

Table 3: Normality Test Table

Variables	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Orientation training	.321	0.248	1.142	.341
Coaching	.306	0.136	1.200	.322
Job rotation	1.047	0.145	.906	.246
Mentoring	1.463	0.304	.208	.254
Continuous job training	.414	0.274	1.574	.201

Source: Survey Data, 2020

3.3 Demographic Analysis

The gender analysis denoted that the male population in the industry is 48 percent while female population is 52 percent. It was identified that although females have more concerns such as inability to work at night, the company management prefers female

as they are more organized and creative. The age analysis demonstrated that the majority of the employees are young. One reason could be that young employees are in high spirits whose thinking is innovative and creative which is important in apparel industry. As per the experience analysis, majority of the employees were less experienced. Apparel industry prefers young employees; therefore, their experience will also be lower in line with the age policy. The education analysis denoted that a greater majority of 65 percent were either advanced level qualified or partly qualified in a degree which too is in line with the age and experience analysis. These findings are in line with literature reviewed too as per Divina (2004) and Muthiani (2013).

Table 4: Hypotheses Testing

Factor	Sig.	Pearson Corre.	Standar. Coeffici. Beta	Test Result
OT	0.001	0.7561	0.712	H0;not supported
CO	0.000	0.8140	0.801	H0;not supported
JR	0.001	0.6846	0.671	H0;not supported
ME	0.002	0.8462	0.815	H0;not supported
CT	0.000	0.7820	0.762	H0;not supported

Source: Survey Data, 2020

3.4 Hypotheses Testing

H1 - Orientation training has a significant impact on Employee Performance of the apparel industry in Sri Lanka.

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The Pearson correlation was 0.7561 denoting a positive relationship between independent and dependent variables. The beta (β) value was 0.712 which reflect there is a strong positive impact of Orientation training on Employee Performance. Orientation training was statistically significant at 0.05 level (P = 0.001 < 0.05). Thus, the null hypothesis (H0) was not supported.

H2: Coaching has a significant impact on Employee Performance in the apparel industry in Sri Lanka.

The Pearson correlation was 0.8140 denoting a positive relationship between independent and dependent variables. The beta (β) value was 0.801 which reflect there is a strong positive impact of coaching on employee performance. Coaching was statistically significant at 0.05 level (P = 0.000 < 0.05). Hence, the null hypothesis (H0) was not supported.

H3: Job rotation has a significant impact on Employee Performance in the apparel industry in Sri Lanka.

The Pearson correlation was 0.6846 denoting a positive relationship between independent and dependent variables. The beta (β) value was 0.671 which reflect there is a strong positive impact of job rotation on employee performance. Job rotation was statistically significant at 0.05 level (P = 0.001 < 0.05). Thus, the null hypothesis (H0) was not supported.

H4: Mentoring has a significant impact on Employee Performance in the apparel industry in Sri Lanka.

The Pearson correlation was 0.8462 denoting a positive relationship between independent and dependent variables. The beta (β) value was 0.815 which reflect there is a strong positive impact of mentoring on employee performance. Mentoring was statistically significant at 0.05 level (P = 0.002 < 0.05). Hence, the null hypothesis (H0) was not supported.

H5: Continuous job training has a significant impact on Employee Performance in the apparel industry in Sri Lanka.

The Pearson correlation was 0.7820 denoting a positive relationship between independent and dependent variables. The beta (β) value was 0.762 which reflect there is a strong positive impact of continuous job training on employee performance. Continuous job training was statistically significant at 0.05 level (P = 0.000 < 0.05). Thus, the null hypothesis (H0) was not supported.

3.5   Discussion on Findings

Orientation training - Orientation training and employee performance variables reflect a strong positive relationship of 75.61 percent. Grounded on this, it appears that orientation training contained useful information on the company history, structure profile, covered all the required information such as contact persons and floor tour, was well planned, timely, interactive and

useful and tools used for the orientation training were effective. As per Charles (2009), orientation training programs are important in the processes of developing a committed and flexible high potential workforce and socializing new employees which will increase employee performance as they are likely to feel more comfortable in the organization right from the beginning. Hence, it could be stated that the findings are in line with the literature.

Coaching - Coaching and employee performance variables reflect a strong positive relationship of 81.4 percent. Based on this, it appears that the coach is able to understand questions raised and help find the right answers/ resources, communicates effectively, encouraging and motivating, encouraging and motivating and assists in clearing doubts. According to Armstrong (2006), coaching involves treating employees as a personal partner in achieving both personal and organizational goals which resolves problems of employees and in turn leads to increase in employee performance. Thus, it could be stated that the findings are in line with the literature.

Job rotation - Job rotation and employee performance variables reflect a strong positive relationship of 68.4 percent. Based on this, it appears that job rotation provided staff with a wider view on the process, an opportunity to get to know colleagues from other teams and share their knowledge and in understanding the bigger picture and performing a job role in a better

manner. According to Bukovinsky (2013), rotating employees will reduce monotony of employees as they do not get bored by the same job, which ultimately motivates them and increase their performance. Hence, it could be stated that the findings are in line with the literature.

Mentoring - Mentoring and employee performance variables reflect a strong positive relationship of 84.62 percent. Based on this, it appears that mentoring program has contributed to better self-perception and understanding one's capabilities, workshops conducted were well planned, relevant to the job role and punctual and mentoring sessions were helpful in developing soft skills. Mentoring contributes to the success of the mentee by improving performance, increasing confidence and addressing strengths and weaknesses as highlighted by Abdul (2011). Thus, it could be stated that the findings are in line with the literature.

Continuous job training - Continuous job training and employee performance variables reflect a strong positive relationship of 78.2 percent. Based on this, it appears that continuous job training has assisted in polishing skills and competencies to stay up-to-date, inform on new technologies and work methods in the apparel industry and have built confidence in employees as they feel updated. According to Aidah (2013), training has to be carried out on a continuous basis as knowledge has to be continually updated. Although this comes with a cost attached, companies can reap the

rewards of providing training for employees as well-trained workers contribute towards increasing productivity. Thus, it could be stated that the findings are in line with the literature.

4. DISCUSSION

Several recommendations can be made based on the data collected and analyzed in further improving the employee performance in the apparel industry. It can be recommended to enhance orientation training by including an off-the job training of the actual work that an employee will be performing on the floor before they are being dropped on floor. This could be done by creating a simulated work environment where employees will handling day to day work for a period of one week or so where they learn the challenges. They can be better prepared in settling down in the role which will improve their performance. It can also be recommended to bring down influential persons like the CEO or chairman of the company where an employee gets to spend time with them and ask questions. This will facilitate in setting down more comfortably as they already know the top management too.

It can be recommended to provide details regarding future coaching sessions at least two weeks prior to the sessions so that employees can be prepared to ask the doubts they have in a better manner. Coaching can be further improved by obtaining suggestions of employees regarding areas where they think coaching is needed. Talented and skilled resource

persons could be arranged with pre-announced date with the agenda so that employees will be able to free their schedules and make it to the session. This will improve employee performance as their doubts will be cleared.

Added recommendation is to carry out both vertical and horizontal job rotation. Under horizontal job rotation employees will be in teams at a similar level. For example, a finance executive will be working with a sales executive. Under vertical job rotation, a finance executive will be working with a finance manager. These will assist in obtaining a wider view of the business process and job role which will improve performance as employees are more knowledgeable and aware.

It can further be recommended to carry out mentoring sessions on a one-on-one basis where individual attention will be paid. This will be an opportunity for an individual to express his/her concerns personally without embarrassment. This will mitigate issues at a personal level which is directly linked to higher employee performance.

The main limitation of the research is that the sample had to be narrowed down to the above stated numbers due to practical difficulties. Including more respondents would have increased the reliability and reduced sampling error. Furthermore, it can be stated that using questionnaire to collect data resulted in problems like incomplete questionnaires. Apart from that, the respondents' thinking was limited to the given set of

questions only. This limits creative thinking.

It could be recommended to carry out a research by considering mid-range apparel companies rather than the industry leaders as training and development is relatively low in those organizations due to budget, resource persons and time limitations as opposed to large scale apparel companies. The need for training and development will be higher in these mid-sized companies. Furthermore, it can be recommended to include more independent variables such as outbound training which will provide a wider understanding. This would facilitate in further enhancing the validity of the research.

5. CONCLUSION

The main research objective was to identify how training and development affects employee performance in the context of the apparel industry in Sri Lanka. The selected independent variables were orientation training, coaching, job rotation, mentoring and continuous job training while the dependent variable was employee performance. These were analyzed in depth through the data collected. Through correlation and regression analysis, the significance of independent variables on employee performance was identified. Hence all the hypotheses set in the research were accepted in this study, denoting that independent variables play a vital role on employee performance. The null hypothesis for all the determinants were not supported proving that there is a relationship between all the independent variables and the dependent variables. Based on the data gathered recommendations were made as to what practical steps be followed in enhancing employee performance such as carrying out orientation training in a simulated environment, pre-informing about coaching sessions, carrying out one-to-one mentoring sessions and undertaking vertical and horizontal job rotations. Based on the above stated data, it could be confidently mentioned that all the research objectives were successfully achieved within the given scope. Finally, it could be drawn that when orientation training, coaching, job rotation, mentoring and continuous job training are increased, employers will be able to increase performance of the workforce. The research is significant as it facilitates employers to understand how they could use training and development and how it affects job performance. This research could also facilitate employers in paying more attention on developing effective and comprehensive use training and development programs.

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